DDC 35n
Digital Document Copier
Network

Printer Driver for Controller

User's Manual

for Windows

© 1999 Hitachi Koki Imaging Solutions, Inc.
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NOTICE TO USER

In an effort to meet the demands of a rapidly changing technology, the manufacturer is continually developing new features and functions to meet your changing printing or printer needs. As a result, this manual may not exactly reflect future changes made to the product. Please be sure to consult all manual updates or addenda when using this product's documentation.

Welcome

Thank you for purchasing the printer controller.

The printer controller is an image controller designed to use the machine as a printer. By connecting the printer controller to the machine, you can directly print documents created on your computer to the machine. In addition, the printer controller is capable of using various functions offered by the machine, such as N-in-1 and Booklet, enabling you to create a wide variety of documents.

This User's Manual explains how to run print cycles on the machine, to which the printer controller is connected. It also gives precautions that you should review before attempting to actually use the printer controller. So, first read this manual carefully and thoroughly; then, keep it close at hand so you can refer to it whenever it becomes necessary.

When operating the printer controller and machine, follow the instructions given in this manual and in the one for the machine. Do not attempt to touch any part that is not covered in these manuals. Never attempt to disassemble or remodel any pieces of equipment, either, to prevent possible hazardous conditions.

Some of the screens shown in this manual may look different from what you will view in actual applications.

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CE Marking (Declaration of Conformity)

We declare under our sole responsibility that the copier and options to which this declaration relates is in conformity with the specifications below.
This declaration is valid for the area of the European Union (EU) only.

Product Type	Printer Controller
Product Name	Hi-35*pc*
Options	32MB Memory, 64MB Memory, Network Interface Card (4179-422, 4179-432), Hard Disk Drive (4179-462)
Standards	EMC[*1] : EN 55 022 (Class B) / 1994 (A1: 1995, A2: 1997) (Limits and method for measurement of radio disturbance characteristics of information technology equipment (ITE)) EN61000-3-2 / 1995 (Electromagnetic compatibility (EMC)-Part 3: Limits, Section 2: Limits for harmonic current emissions (equipment input current ≦ 16A per phase)) EN 50 082-1/1992 (Electromagnetic compatibility-Generic immunity standard Part1: Residential, commercial and light industry) IEC 801-2 / 1991 (Electrostatic discharge requirement) IEC 801-3 / 1984 (Radiated electromagnetic field requirement) IEC 801-4 / 1988 (Electrical fast transient / burst requirement) Notes : This device must be used with shielded interface cables. EN 50 082-1 / 1992 (Electromagnetic compatibility-Generic immunity standard Part1: Residential, commercial and light industry) IEC 801-2 / 1991 (Electrostatic discharge requirement) IEC 801-3 / 1984 (Radiated electromagnetic field requirement) IEC 801-4 / 1988 (Electrical fast transient / burst requirement) Notes : *1) EMC performance: This product was designed for operation in a typical office environment
EC Directives	EMC : 89 / 336 / EEC and 93 / 68 / EEC

This device must be used with shielded interface cables. The use of non-shielded cables is likely to result in interference with radio communications and is prohibited under EC Directive rules.

EC-01

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Chapter 1

Before Using the Printer Controller

1. Features of the Printer Controller

Features of the Printer Controller

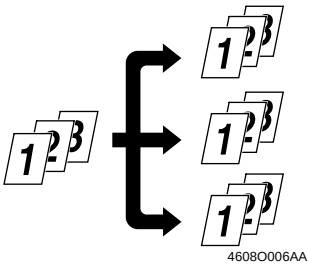
The printer controller is an image controller designed to use the machine as a printer, allowing you to print documents directly to the machine from a computer to which the printer controller is connected. The printer driver, which is used during printing, is equipped with various functions that make the most out of the features of the machine. They enable you to use the same functions as those offered by the machine. When actually running a print cycle, you can specify various functions of the machine on your computer screen.

NOTE

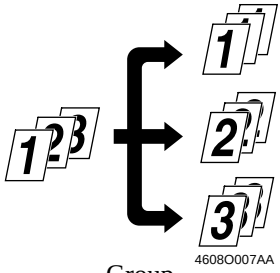
- *When using the printer controller, be sure to set the machine in the On Line state.*
- *Some functions offered by the machine cannot be combined, such as Staple and Hole-Punch, and others may not be used because of a paper size involved. The functions that cannot be selected either appear dimmed or appended with a ⦸ before the menu option.*
  Further, if functions that are incompatible with each other are specified, the Conflict Settings Validation dialog box appears, prompting you to change the settings. When this dialog box appears, check the details and reselect the functions to ensure function compatibility.

Various Printing Functions

- Makes prints that are sorted into complete sets of the originals (Collated) or grouped into uncollated groups, each containing prints of one original (Group).



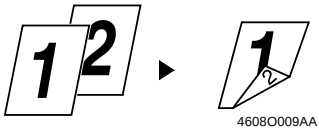
Collated



Group

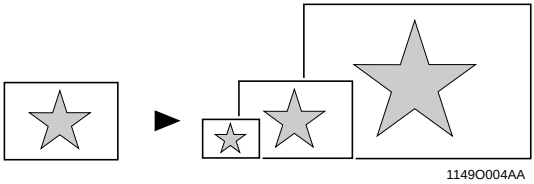
- Prints two pages of originals on both front and back sides of a single sheet of paper.

Bind Long Edge

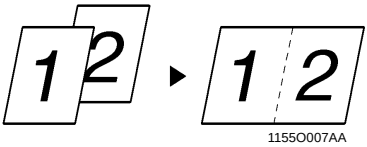


Bind Short Edge

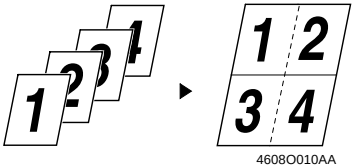
- Enlarges or reduces the image on the original.



- Prints two pages or four pages of originals on a single sheet of paper.

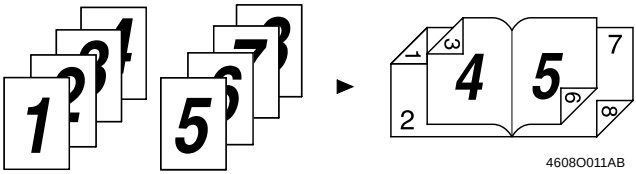


2in1

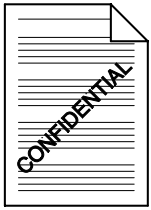


4in1

- Prints four pages of originals to both front and back sides of a single sheet of paper.



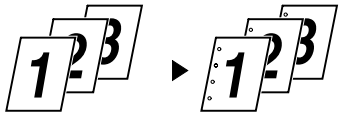
- Places text in the background.



4608O001AA

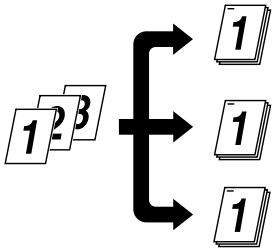
- Makes prints of complete sets of the originals, stapled together or punched for filing.

4608O012AB

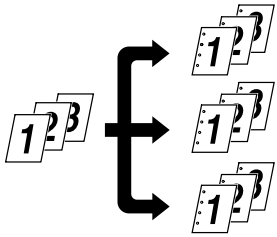


4608O026DA

By combining Sort or Group with other finishing capabilities, you can make complete sets of documents for immediate delivery without having to do any further processing.



4608O014AC

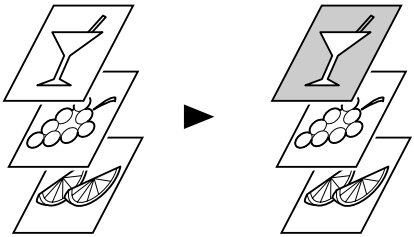


4608O027DA

- Adds a reference number (Distribution Number) to each document set during printing.

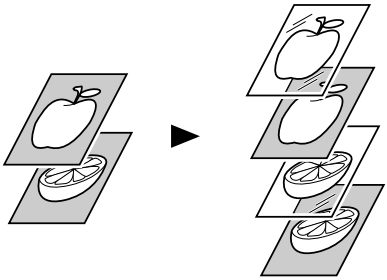
1166O114AA

- Prints only the cover on a different type of paper (such as colored paper).



1149O013AA

- Capable of printing on OHP transparencies. You can also insert interleaves, either blank or printed with the same contents as those on the OHP transparencies.



1149O017AA

Administrative Functions

- Different accounts can be managed for printing records, just as when using the machine as a copier. The setting of 100 accounts or 1000 accounts depends on the setting made on the machine.
- Printing of confidential documents may be withheld until a legitimate password is entered on the machine.

About PCL5e and PCL6

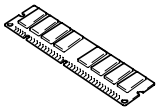
In PCL6, graphics capability is expanded from that of PCL5e.

2. Configuration

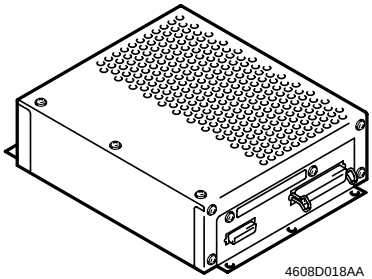
Configuration

The printer controller may be configured with the following options.

Memory (32MB/64MB, Option)
Expands the memory capacity of Hi-35*pc*.

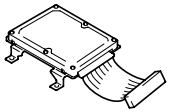


4608O018AA



4608D018AA

Printer Controller
Allows you to use the machine as a printer controlled by your personal computer.



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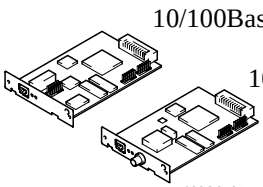
Hard Disk Drive (Option)
For downloading PS fonts for the exclusive use in Macintosh.



4608O019AA

NIC Board (Option)
Allows you to use the machine as a printer in a network environment.

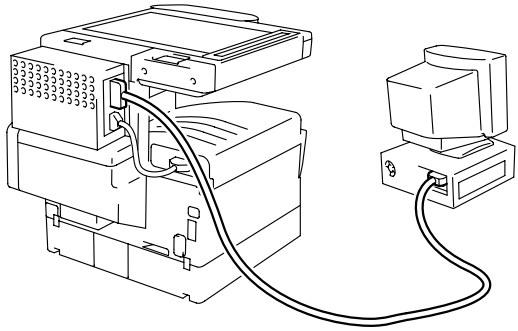
NOTE
The Hard Disk Drive is for the exclusive use in Macintosh.

3. Connecting the Printer Controller

Connecting the Printer Controller

The printer controller is mounted on the rear of the machine. The installation procedures are to be performed by the service personnel.

The printer controller is connected to the machine with the engine interface cable and to the computer with a printer cable or network cable. Power to the printer controller is supplied from the machine.



4608O016AA

NOTE
Do not connect any peripheral devices to the engine interface cable that is used to connect the printer controller to the machine.

TIP
If you cannot print from your computer, check that the engine interface cable and printer cable are connected to the corresponding connectors.

4. Settings Made on the Machine

The following functions must be set on the machine using its Utility Mode, as they relate to the printer controller.

Priority Device

Select the priority of use of the machine, either as a copier or printer.

Copier: The machine is used as a copier.
The machine starts the print cycle only after it has received the entire data of a particular print job.
The machine can be used for copying, since it starts printing only after it has received the entire data of the job for printing. This means that more time is available to you for copying, but you have to wait for a longer time before a particular print job is done.

Printer: The machine is used as a printer.
The machine starts the print cycle before it completes receiving the entire data of a particular print job.
On receiving the data for one page, the machine starts printing, accepting no other job for copying. This means that less time is available to you for copying, but you do not have to wait long before a particular print job is done.

On Line

This function is the same as that available in ordinary printers as On Line/Off Line. Select On Line normally.

Test Print

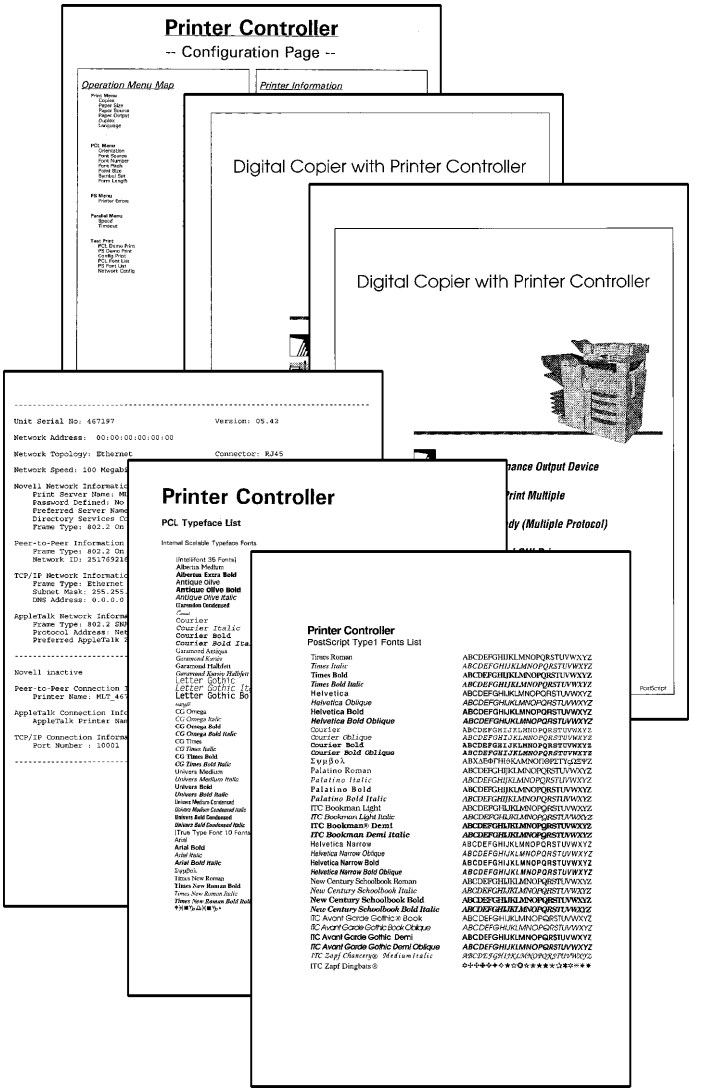
The following six types of test print will be output when a test print is run from the machine:

- CONFIGURAITON PRINT
- NETWORK CONFIGURATION PRINT
- PCL FONT LIST
- PCL DEMO PRINT
- PS FONT LIST
- PS DEMO PRINT

Here is the procedure to run a test print. These operations are made on the machine.
1. Press the Utility key.
2. Press the Test Print key.

NOTE
Font lists contain only those fonts that are installed as standard and any fonts later added are not displayed.

- Refer to the Test Print Outputs



5. Installing the Printer Drivers

Installing Various Printer Drivers

To make 100% use of the functions offered by the machine mounted with the printer controller, install the attached printer drivers in your computer. The printer controller is furnished with the following printer drivers.

- Windows 95 printer drivers
  Digital Copier 35cpm (PCL5e, PCL6, PostScript)

- Windows NT 4.0 printer drivers
  Digital Copier 35cpm (PCL5e, PCL6, PostScript)

- Windows 3.1 printer drivers
  Digital Copier 35cpm (PCL5e, PCL6, PostScript)

- Windows NT 3.51 printer drivers
  Digital Copier 35cpm (PCL5e, PostScript)

- Macintosh printer drivers

Install the printer driver suitable for the operating system that runs on your computer. For the installation procedures, see the relevant page as detailed below.

Installing the Windows printer driver:
Windows 95⇒ p. 2-2
Windows NT 4.0 ⇒ p. 2-16
Windows 3.1⇒ p. 2-32
Windows NT 3.51⇒ p. 2-39

Installing the Macintosh printer driver:
See the User's Manual for Macintosh separately provided.

Chapter 2

Installing the Printer Driver

1. Windows 95

Operating Environment

This section explains the required environment for the printer driver.
Before installing the printer driver, check that your computer meets the following requirements. If it doesn't, the printer driver may not function properly.

Personal computer		IBM PC or a compatible with an i486DX or higher CPU
Operating system		Windows 95 (English)
Memory		8MB or more
I/O interface	Parallel	Centronics interface
	Network	10Base-T/2 (UTP/BNC), 10/100BaseT (UTP) ; supported protocols are, IPX/SPX (NetWare 3.1x & 4.x), and TCP/IP (lpr/lpd)
Free space on hard disk		3MB or more

- Windows NT 4.0
  For the operating environment and installation procedure for the Windows NT 4.0 printer driver, see p. 2-16.

- Windows 3.1
  For the operating environment and installation procedure for the Windows 3.1 printer driver, see p. 2-32.

- Windows NT 3.51
  For the operating environment and installation procedure for the Windows NT 3.51 printer driver, see p. 2-39.

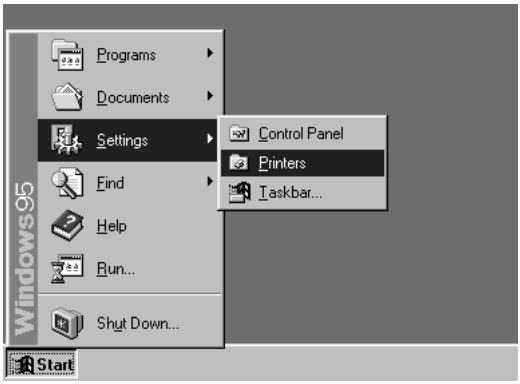
Installation

This section explains the installation procedure for the Windows 95 printer driver.

NOTE
Before starting to install the printer driver, be sure first to quit all applications.

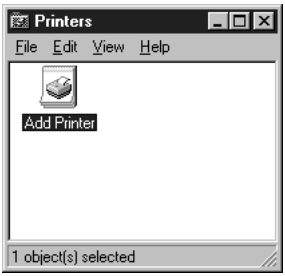
TIP
The following procedure assumes that the machine is a Digital Copier 35cpm and the printer driver is PCL5e.

1. Click the [Start] button. From the menu that appears, select "Settings," then click "Printers."



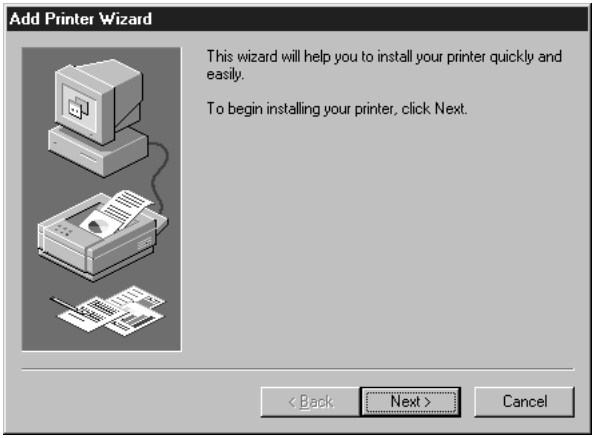
4608P001CD

2. The Printers window will appear. Double-click the "Add Printer" icon.



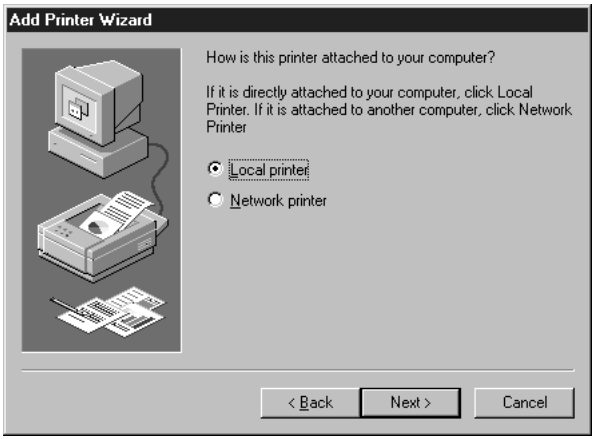
4608P002CB

3. The "Add Printer Wizard" will appear. Click the [Next>] button.



4608P003CB

4. A window will appear, asking how the printer is to be connected.
   If your computer is directly connected to the machine, select "Local printer" and then click the [Next>] button.

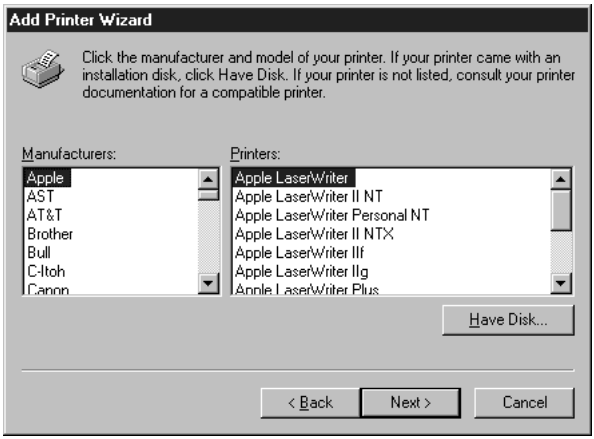


4608P004CB

NOTE

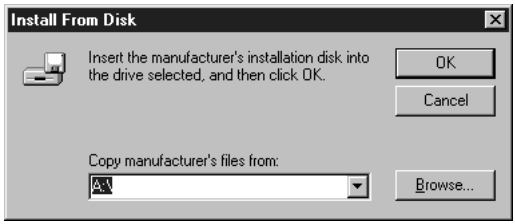
- *When installing the printer driver in a computer connected to the machine via a network, be sure to consult the network administrator.*
- *This is a request to be made of the network administrator. To install the printer driver in a computer connected to a network, select "Network printer" and click the [Next] button. Then, a window will appear prompting you to enter the network path; so enter the path.*

5. A window will appear, prompting you to select the manufacturer and model of your printer. Click the [Have Disk...] button on the lower right part of the screen.



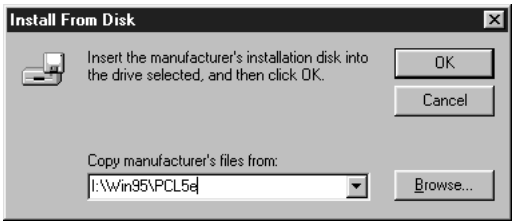
4608P005CA

6. The "Install From Disk" dialog box will appear. Install the printer controller driver CD-ROM that is included with the printer controller in the CD-ROM drive of your computer.



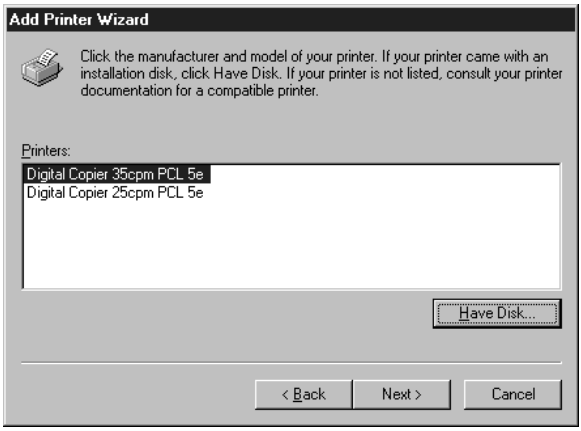
4608P006CA

7. Type the drive name in the "Copy manufacturer's file from" box. (As an example, the CD-ROM drive is drive I.)
   Click the [OK] button.
   To install PCL5e: I:\Win95\PCL5e
   To install PCL6: I:\Win95\PCL6
   To install PS: I:\Win95\PS



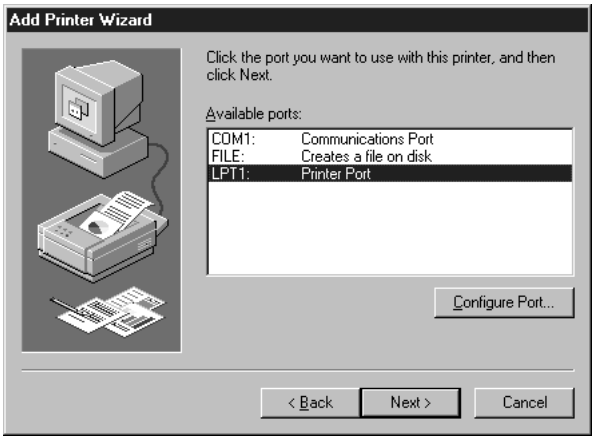
4608P190CA

8. A "Printers" list appears.
   Select the driver to be installed and click the [Next>] button.



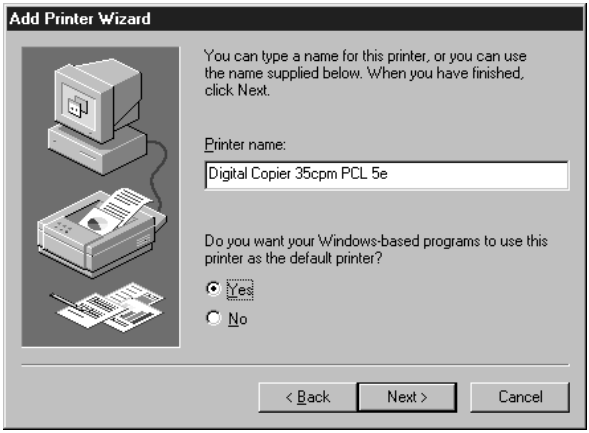
4608P194CA

9. A window that prompts you to select the port will appear. Select the port (normally "LPT:") to which the printer cable has been connected, then click the [Next>] button.



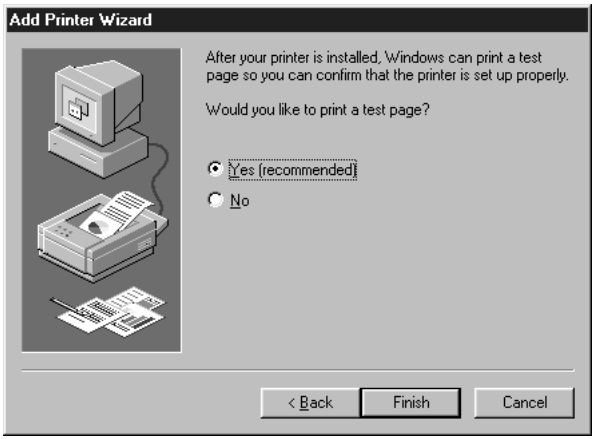
4608P008CB

10. A window that asks you to confirm the printer name will appear. Check the printer name. If you want to change the printer name to one that is easy to remember, change it in this step. If you want to designate this printer as the default printer, select "Yes."
Click the [Next>] button.



4608P195CA

11. If you want to print a test page, select "Yes (recommended)." If you elect not to, select "No." It is recommended that a test page be printed to ensure that the printer driver has been installed properly. Now, click the [Finish] button.



4608P010CB

12. Installation will start.

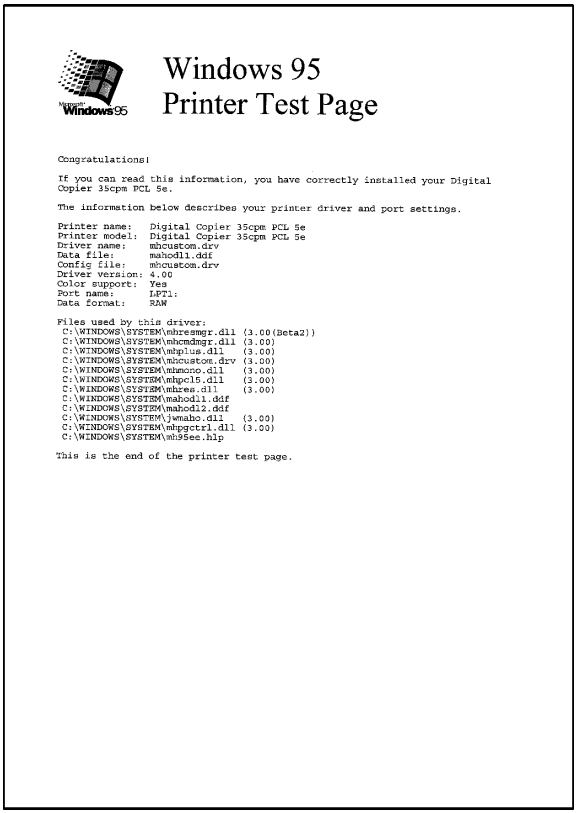
When all the files have been copied from the floppy disk, the corresponding icon will be added to the "Printers" window.
This completes the installation.

4608P196CA

Test Print

If "Yes [recommended]" has been selected in step 11 to specify printing of a test page, test printing starts. Check that the printer name is correct.

Refer to the Test Print Output.



Windows 95
Printer Test Page

Congratulations!

If you can read this information, you have correctly installed your Digital Copier 35cpm PCL 5e.

The information below describes your printer driver and port settings.

```
Printer name:    Digital Copier 35cpm PCL 5e
Printer model:   Digital Copier 35cpm PCL 5e
Driver name:     mhcustom.drv
Data file:       mahodll.ddf
Config file:     mhcustom.drv
Driver version: 4.00
Color support:   Yes
Port name:       LPT1:
Data format:     RAW

Files used by this driver:
 C:\WINDOWS\SYSTEM\mhresmgr.dll (3.00(Beta2))
 C:\WINDOWS\SYSTEM\mhcmdmgr.dll (3.00)
 C:\WINDOWS\SYSTEM\mhplus.dll   (3.00)
 C:\WINDOWS\SYSTEM\mhcustom.drv (3.00)
 C:\WINDOWS\SYSTEM\mhmono.dll   (3.00)
 C:\WINDOWS\SYSTEM\mhpcl5.dll   (3.00)
 C:\WINDOWS\SYSTEM\mhres.dll    (3.00)
 C:\WINDOWS\SYSTEM\mahodll.ddf
 C:\WINDOWS\SYSTEM\mahodl2.ddf
 C:\WINDOWS\SYSTEM\jwuaho.dll   (3.00)
 C:\WINDOWS\SYSTEM\mhpgctrl.dll (3.00)
 C:\WINDOWS\SYSTEM\mh95ee.hlp

This is the end of the printer test page.
```

4608O029CA

Making General Settings Before Using the Printer

The printer driver requires setting of items that are common to all print jobs, including the port to which the printer cable is connected and optional devices configured with the machine. These settings must be made using property sheets available from the Properties command after the printer driver has been installed or when the operating environment is changed.

The most common settings have already been made when the printer driver is installed, meaning that you do not usually bother to change them. Some items must, however, be changed in the following cases.

Cases where changes are necessary	Applicable property sheets	Ref. page
• You want to add a comment to distinguish the printer from others	"General"	p.2-13
• The computer's connecting port has been changed • You want to change the conditions for the display of a timeout error • You want to designate a port to which the machine is connected via a network (this setting must be made on a computer connected to the machine via a network)	"Details"	p.2-14
• You want to share the machine with other computers connected to the same network (this setting must be made on the computer directly connected to the machine)	"Sharing"	p.2-15

For the details of "Device Option," see Chapter 3.

Displaying a Property Sheet

You have two different steps to take to display a property sheet. The contents of a particular property sheet slightly differ depending on how you access it. Select the appropriate one according to your need.

(1) To display a property sheet from the printer folder
(2) To display a property sheet from an application menu
Below are the detailed procedures for each approach.

Displaying a Property Sheet from the Printer Folder

1. Click the [Start] button and select “Settings.” Then, click “Printers.”
2. Click the icon of “ Digital Copier 35cpm PCL5e.”
3. Select “Properties” from the menu that will appear. This shows the property sheet.

This method is mainly used when there will be no big changes in the settings once made, such as [Device Option]. It allows you to set the environment in which you will use the printer. The settings made through this method are valid in all applications.

Displaying a Property Sheet from an Application Menu

1. Select [Print...] from the [File] menu of the application.
2. Check that the “Name” of the “Printer” is “Digital Copier 35cpm PCL5e.” If “Digital Copier 35cpm PCL5e” is not selected, click [▼] and, from the menu that will then appear, select “Digital Copier 35cpm PCL5e”
3. Click the [Properties] button. This shows the property sheet.

This method allows you to set the number of copies and paper for each document. The settings made on the property sheet accessed through the application are valid only for that particular application.

TIP
To show a property sheet other than Paper, click the corresponding tab located on the top part of the screen.

NOTES

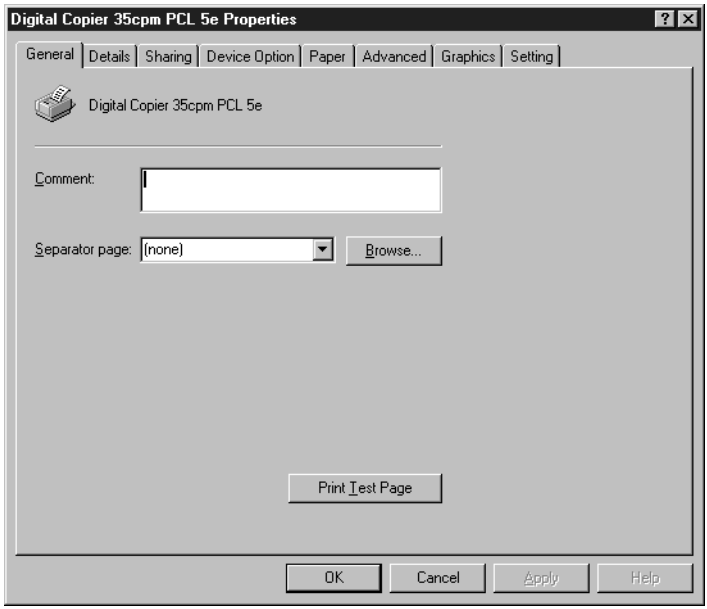
The steps to display a property sheet may be different depending on the application. Follow the correct procedure according to the application. The procedure above is based on the application WordPad.

"General" Property Sheet

This property sheet is commonly available to the Windows 95-based printer drivers.

There is no need of making changes in settings for ordinary operating environments. See Windows 95 Help for more details.

NOTE
If "Separator page" is specified, a separator page can be inserted between multiple print jobs.

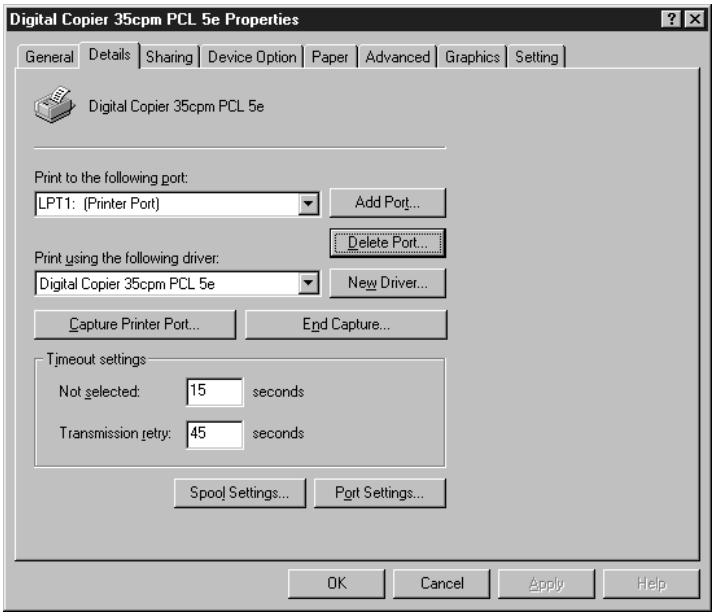


4608P197CA

"Details" Property Sheet

This property sheet is commonly available to the Windows 95-based printer drivers.

There is no need of making changes in settings for ordinary operating environments. See Windows 95 Help for more details.

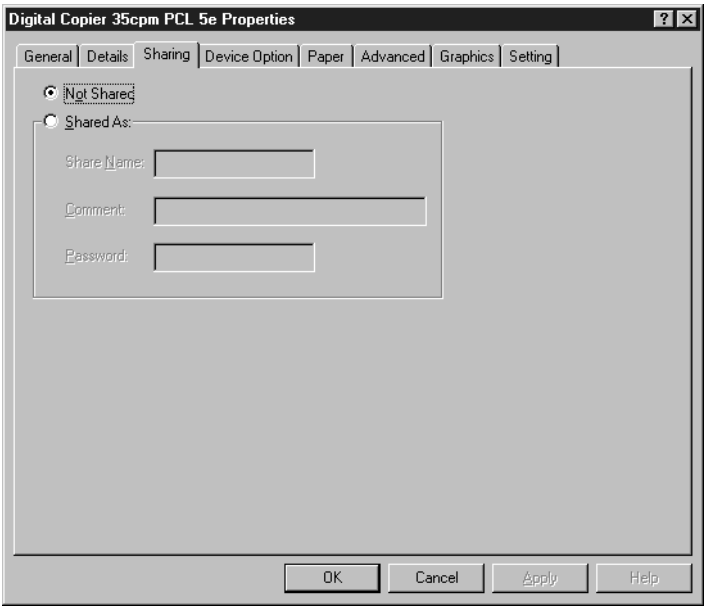


4608P198CA

"Sharing" Property Sheet

This property sheet is commonly available to the Windows 95-based printer drivers.

It allows you to make settings for sharing a printer among different users. It is displayed only when a Windows 95-based printer is being used over the network. For more details, see Windows 95 Help for more details.



4608P199CA

2. Windows NT4.0

Operating Environment

This section explains the required environment for the printer driver.
Before installing the printer driver, check that your computer meets the following requirements. If it doesn't, the printer driver may not function properly.

Personal computer		IBM PC or a compatible with an i486DX or higher CPU
Operating system		Windows NT 4.0 (English)
Memory		8MB or more
I/O interface	Parallel	Centronics interface
	Network	10Base-T/2 (UTP/BNC), 10/100BaseT (UTP) ; supported protocols are, IPX/SPX (NetWare 3.1x & 4.x), and TCP/IP (lpr/lpd)
Free space on hard disk		3MB or more

- Windows 95
  For the operating environment and installation procedure for the Windows 95 printer driver, see p. 2-2.

- Windows 3.1
  For the operating environment and installation procedure for the Windows 3.1 printer driver, see p. 2-32.

- Windows NT 3.51
  For the operating environment and installation procedure for the Windows NT 3.51 printer driver, see p. 2-39.

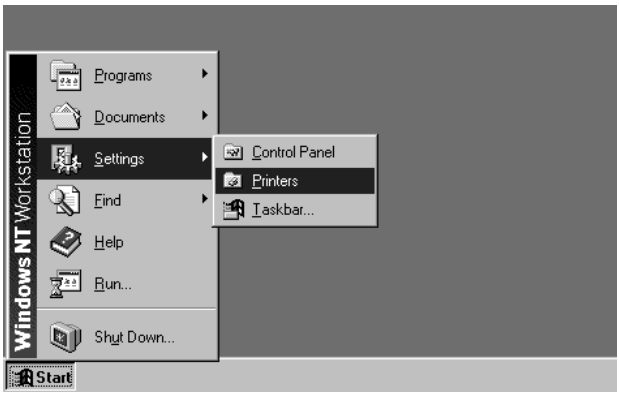
Installation

This section explains the installation procedure for the Windows NT 4.0 printer driver.

NOTE
Before starting to install the printer driver, be sure first to quit all applications.

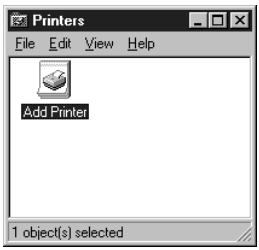
TIP
The following procedure assumes that the machine is a Digital Copier 35cpm and the printer driver is PCL5e.

1. Click the [Start] button. From the menu that appears, select "Settings," then click "Printers."



4608P038CC

2. The Printers window will appear. Double-click the "Add Printer" icon.

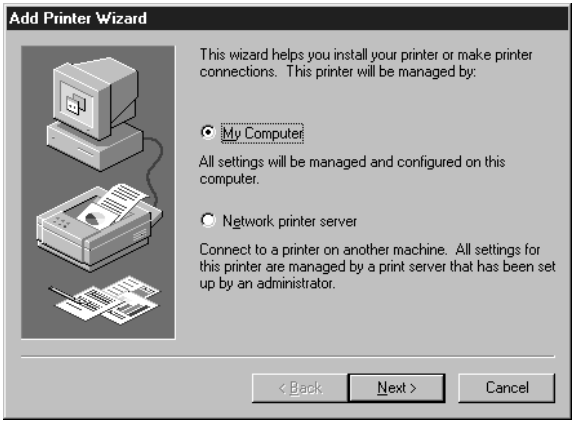


4608P002CB

3. If the printer is directly connected to the computer, select "My Computer." If the printer is connected via a network printer server, select "Network printer server."

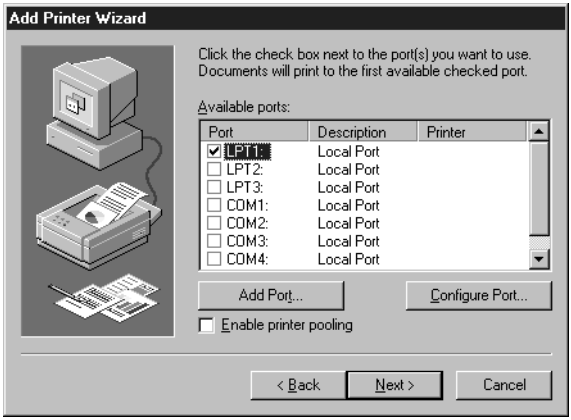
NOTE
When installing the printer driver in a computer connected to the machine via a network, be sure to consult the network administrator.

4. Click the [Next>] button.



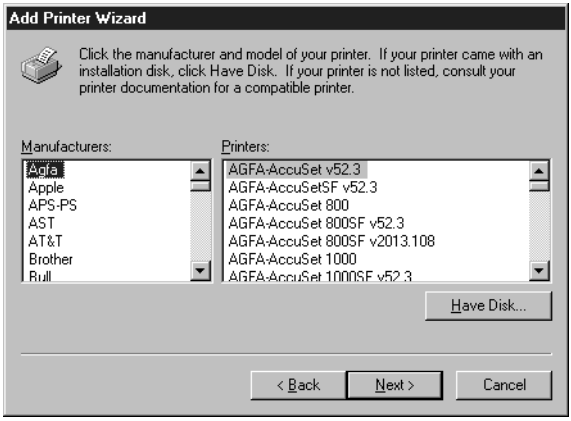
4608P039CA

5. Select the name of the port to be used and click the [Next>] button.



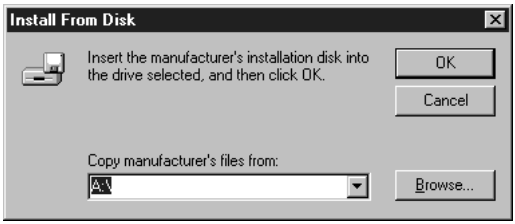
4608P040CA

6. A window will appear, prompting you to select the manufacturer and model of your printer. Click the [Have Disk...] button on the lower right part of the screen.



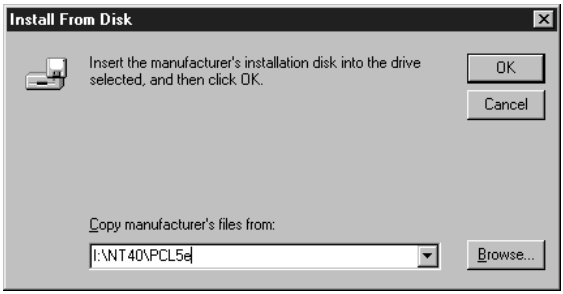
4608P041CA

7. The "Install From Disk" dialog box will appear. Install the printer controller driver CD-ROM that is included with the printer controller in the CD-ROM drive of your computer.



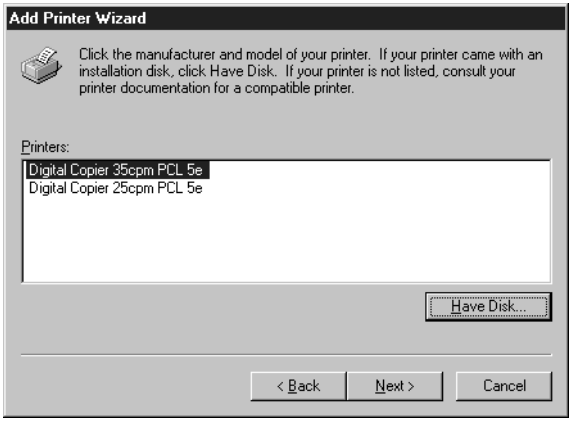
4608P006CA

8. Type the drive name in the "Copy manufacturer's file from" box. (As an example, the CD-ROM drive is drive I.)
   Click the [OK] button.
   To install PCL5e: I:\NT40\PCL5e
   To install PCL6: I:\NT40\PCL6
   To install PS: I:\NT40\PS



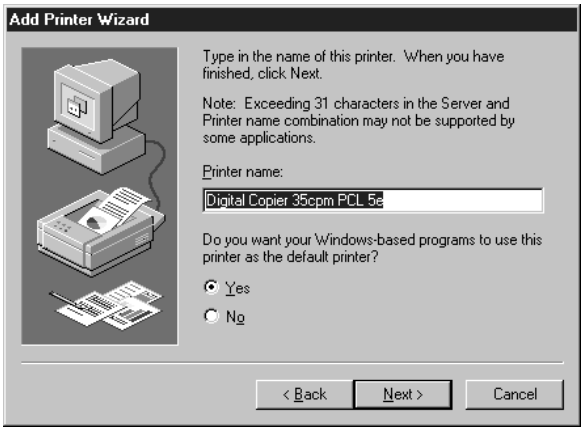
4608P191CB

9. A "Printers" list appears.
   Select the driver to be installed and click the [Next>] button.



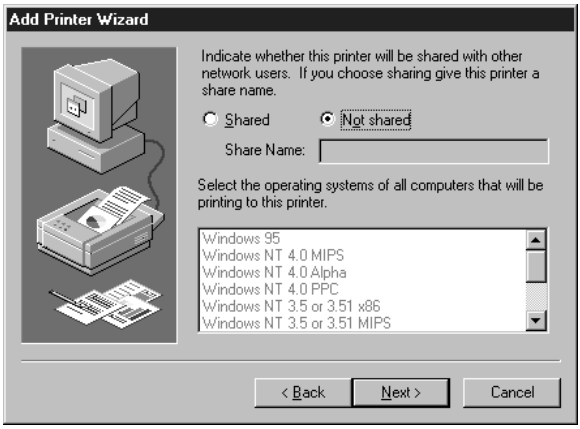
4608P200CA

10. If you want to change the printer name that is displayed, change the "Printer name" on this screen. If not, leave it as is. Click the [Next>] button.



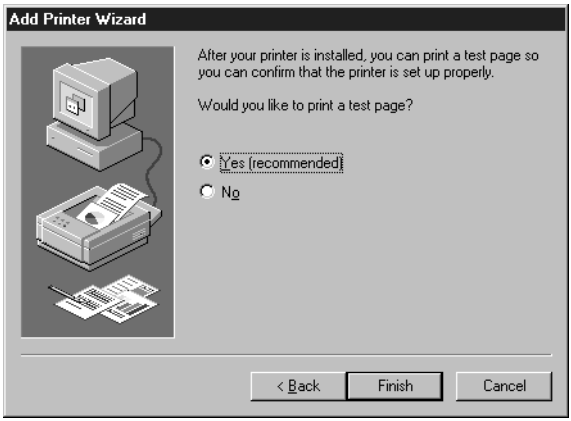
4608P201CA

11. If you share the printer with other users, select "Shared" and type the share name in the box to the right of "Share Name." If not, select "Not shared." Click the [Next>] button.



4608P043CA

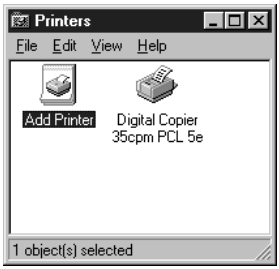
12. If you want to print a test page, select "Yes (recommended)." If you elect not to, select "No." It is recommended that a test page be printed to ensure that the printer driver has been installed properly. As the last step, click the [Finish] button.



4608P044CA

13. Installation will start.

When all the files have been copied from the floppy disk, the corresponding icon will be added to the "Printers" window. This completes the installation.

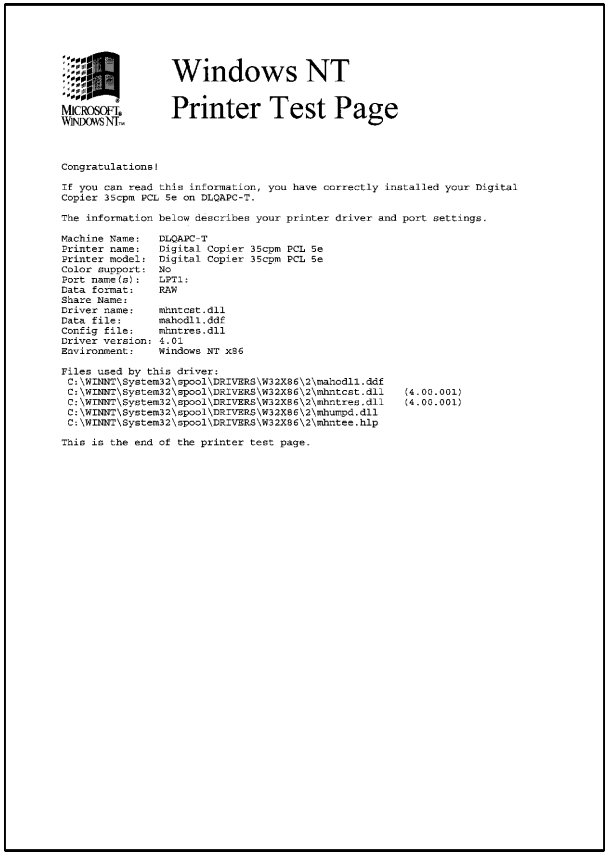


4608P196CA

Test Print

If "Yes (recommended)" has been selected in the step to specify printing of a test page, test printing starts. Check that the printer name is correct.

Refer to the Test Print Output.



Windows NT
Printer Test Page

Congratulations!

If you can read this information, you have correctly installed your Digital Copier 35cpm PCL 5e on DLQAPC-T.

The information below describes your printer driver and port settings.

Machine Name:	DLQAPC-T
Printer name:	Digital Copier 35cpm PCL 5e
Printer model:	Digital Copier 35cpm PCL 5e
Color support:	No
Port name(s):	LPT1:
Data format:	RAW
Share Name:	
Driver name:	mhntcst.dll
Data file:	mahodll.ddf
Config file:	mhntres.dll
Driver version:	4.01
Environment:	Windows NT x86

Files used by this driver:
C:\WINNT\System32\spool\DRIVERS\W32X86\2\mahodll.ddf
C:\WINNT\System32\spool\DRIVERS\W32X86\2\mhntcst.dll (4.00.001)
C:\WINNT\System32\spool\DRIVERS\W32X86\2\mhntres.dll (4.00.001)
C:\WINNT\System32\spool\DRIVERS\W32X86\2\mhumpd.dll
C:\WINNT\System32\spool\DRIVERS\W32X86\2\mhntee.hlp

This is the end of the printer test page.

4608O030CA

Making General Settings Before Using the Printer

The printer driver requires setting of items that are common to all print jobs, including the port to which the printer cable is connected and optional devices configured with the machine. These settings must be made using property sheets available from the Properties command after the printer driver has been installed or when the operating environment is changed.

The most common settings have already been made when the printer driver is installed, meaning that you do not usually bother to change them. Some items must, however, be changed in the following cases.

Cases where changes are necessary	Applicable property sheet	Ref. page
• You want to add a comment to distinguish the printer from others	"General"	p.2-27
• The computer's connecting port has been changed • You want to change the conditions for the display of a timeout error • You want to designate a port to which the machine is connected via a network (this setting must be made on a computer connected to the machine via a network)	"Ports"	p.2-28
• You want to specify a time frame for the machine operation	"Scheduling"	p.2-29
• You want to share the machine with other computers connected to the same network (this setting must be made on the computer directly connected to the machine)	"Sharing"	p.2-30
• You want to restrict access to the machine • You want to check the accounts of the machine users	"Security"	p.2-31

For the details of "Device Option," see Chapter 3.

Displaying a Property Sheet

You have two different steps to take to display a property sheet. The contents of a particular property sheet slightly differ depending on how you access it. Select the appropriate one according to your need.

(1) To display a property sheet from the printer folder
(2) To display a property sheet from an application menu
Below are the detailed procedures for each approach.

Displaying a Property Sheet from the Printer Folder

1. Click the [Start] button and select "Settings." Then, click "Printers."
2. Click the icon of "Digital Copier 35cpm PCL5e"

<To display the Device Option sheet>
3. Click "Properties" from the [File] menu.

<To display a sheet other than Device Option>
3. Click [Document Defaults...] from the menu that will then appear. This opens the [Digital Copier 35cpm PCL5e Default].

This method is mainly used when there will be no big changes in the settings once made, such as [Device Option]. It allows you to set the environment in which you will use the printer. The settings made through this method are valid in all applications.

Displaying a Property Sheet from an Application Menu

1. Select [Print...] from the [File] menu of the application.
2. Check that the "Name" of the "Printer" is "Digital Copier 35cpm PCL5e." If " Digital Copier 35cpm PCL5e" is not selected, click [▼] and, from the menu that will then appear, select "Digital Copier 35cpm PCL5e."
3. Click the [Properties] button. This shows the property sheet.

This method allows you to set the number of copies and paper for each document. The settings made on the property sheet accessed through the application are valid only for that particular application.

TIP

To show a property sheet other than Paper, click the corresponding tab located on the top part of the screen.

NOTES

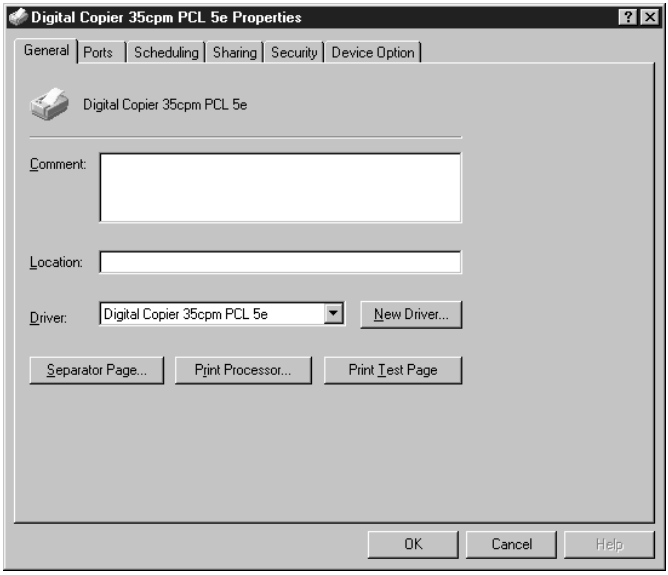
- *The steps to display a property sheet may be different depending on the application. Follow the correct procedure according to the application. The procedure above is based on the application WordPad.*
- *With PostScript, the contents are different between when the property sheet is accessed from Print Manager and when accessed from an application.*

"General" Property Sheet

This property sheet is commonly available to the Windows NT 4.0-based printer drivers.

There is no need of making changes in settings for ordinary operating environments. See Windows NT 4.0 Help for more details.

NOTE
If "Separator page" is specified, a separator page can be inserted between multiple print jobs.

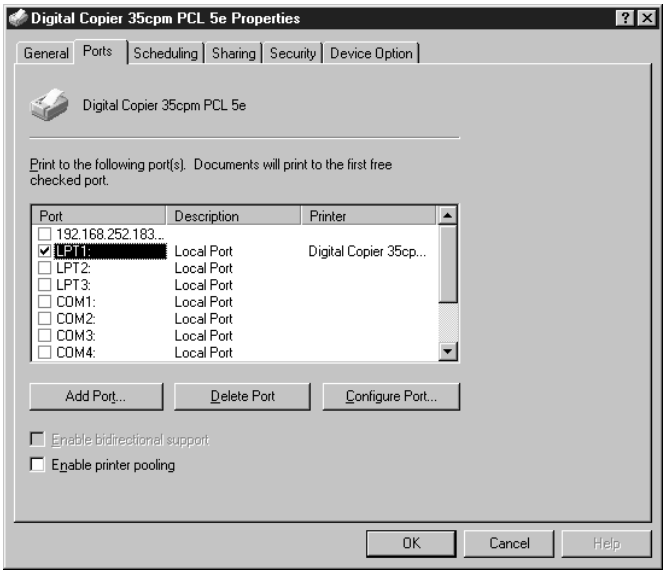


4608P202CA

"Ports" Property Sheet

This property sheet is commonly available to the Windows NT 4.0-based printer drivers.

There is no need of making changes in settings for ordinary operating environments. See Windows NT 4.0 Help for more details.

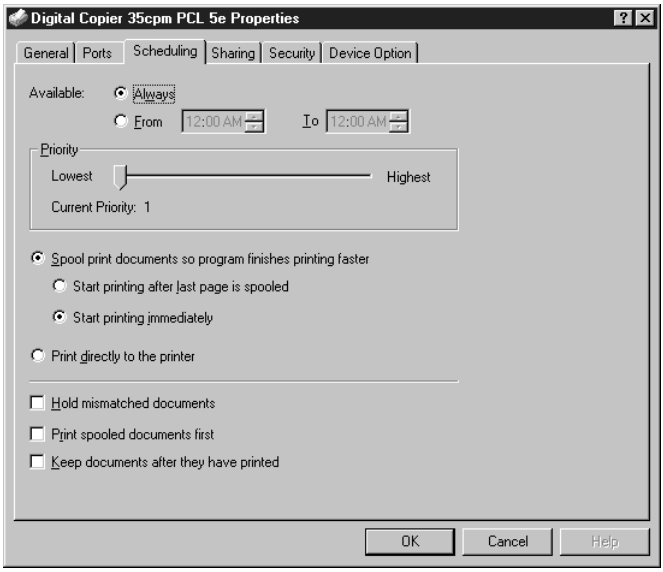


4608P203CA

"Scheduling" Property Sheet

This property sheet is commonly available to the Windows NT 4.0-based printer drivers.

There is no need of making changes in settings for ordinary operating environments. See Windows NT 4.0 Help for more details.

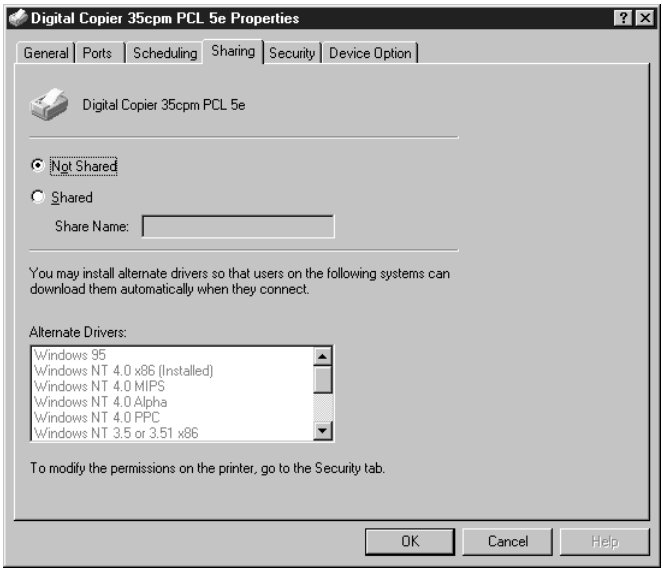


4608P204CA

"Sharing" Property Sheet

This property sheet is commonly available to the Windows NT 4.0-based printer drivers.

There is no need of making changes in settings for ordinary operating environments. See Windows NT 4.0 Help for more details.

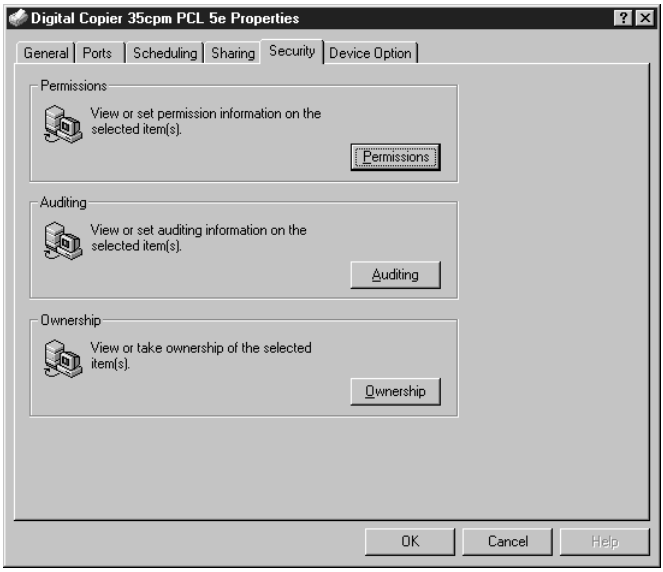


4608P205CA

"Security" Property Sheet

This property sheet is commonly available to the Windows NT 4.0-based printer drivers.

There is no need of making changes in settings for ordinary operating environments. See Windows NT 4.0 Help for more details.



4608P206CA

3. Windows 3.1

Operating Environment

This section explains the required environment for the printer driver.
Before installing the printer driver, check that your computer meets the following requirements. If it doesn't, the printer driver may not function properly.

Personal computer		IBM PC or compatible with an i486DX or higher CPU
Operating system		Windows 3.1 (English)
Memory		8MB or more
I/O interface	Bidirectional parallel	Centronics interface
	Network	10Base-T/2 (UTP/BNC), 10/100BaseT (UTP) ; supported protocols are, IPX/SPX (NetWare 3.1x & 4.x), and TCP/IP (lpr/lpd)
Free space on hard disk		3MB or more

- Windows 95
  For the operating environment and installation procedure for the Windows 95 printer driver, see p. 2-2.

- Windows NT 4.0
  For the operating environment and installation procedure for the Windows NT 4.0 printer driver, see p. 2-16.

- Windows NT 3.51
  For the operating environment and installation procedure for the Windows NT 3.51 printer driver, see p. 2-39.

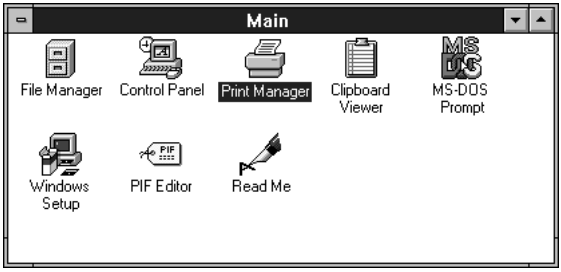
Installation

This section explains the installation procedure for the Windows 3.1 printer driver.

NOTE
Before starting to install the printer driver, be sure first to quit all applications.

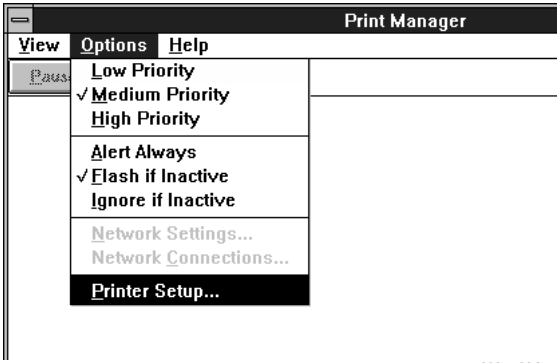
TIP
The following procedure assumes that the machine is a Digital Copier 35cpm and the printer driver is PCL5e.

1. Double-click the "Print Manager" icon in the "Main" group.



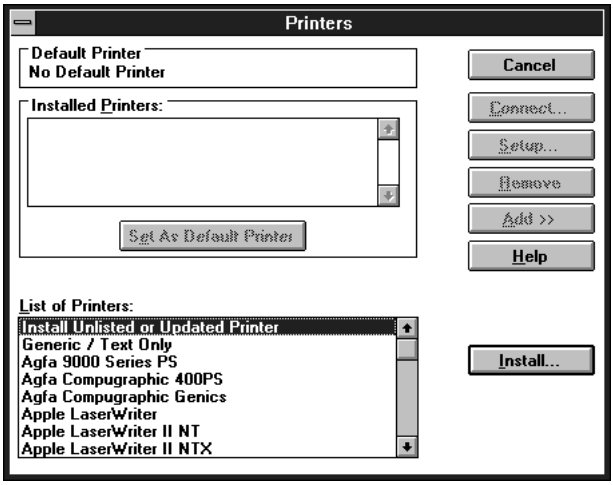
4608P127CA

2. The "Print Manager" dialog box will appear.
   Select "Printer Setup..." from the [Options] menu.



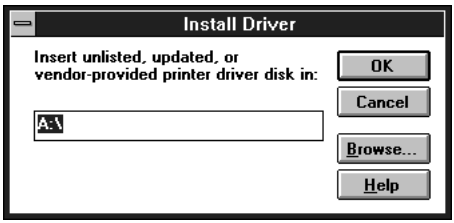
4608P128CB

3. The lower part of the "Printers" dialog box will appear. Select "Install Unlisted or Updated Printer" and click the [Install...] button.



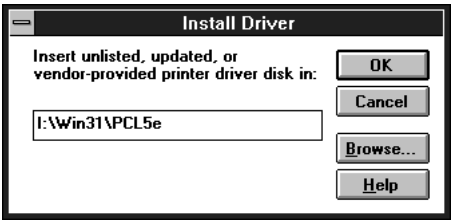
4608P129CA

4. The "Install Driver" dialog box will appear. Install the printer controller driver CD-ROM that is included with the printer controller in the CD-ROM drive of your computer.



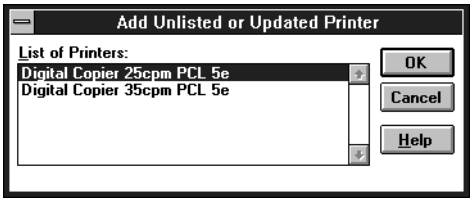
4608P119CA

5. Type the drive name in the The "Install Driver" dialog box. (As an example, the CD-ROM drive is drive I.)
   Click the [OK] button.
   To install PCL5e: I:\Win31\PCL5e
   To install PCL6: I:\Win31\PCL6
   To install PS: I:\Win31\PS



4608P192CB

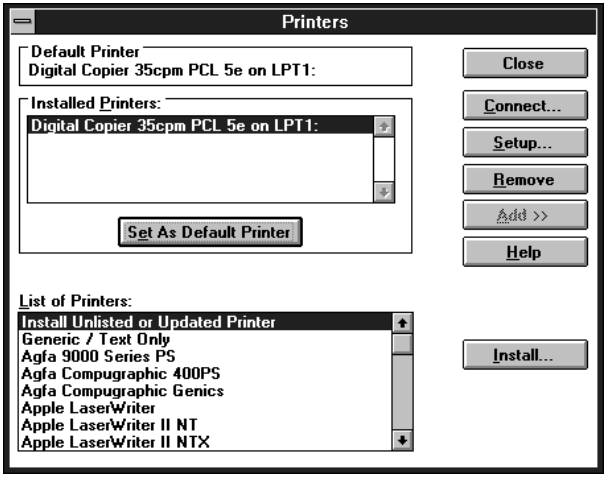
6. The "List of Printers" appears.
   Select the driver to be installed and click the [OK] button.



4608P207CA

7. Installation will start.

When installation is completed, the corresponding icon will be added to the "Installed Printers" list of the "Printers" dialog box. This completes the installation procedure.



4608P208CA

Displaying a Property Sheet

You have two different steps to take to display a property sheet. The contents of a particular property sheet slightly differ depending on how you access it. Select the appropriate one according to your need.

(1) To display a property sheet from Print Manager
(2) To display a property sheet from an application menu
Below are the detailed procedures for each approach.

Displaying a Property Sheet from Print Manager

1. Open [Print Manager] from [Main].
2. Select "Printer" whose properties are to be shown.
3. Select [Printer Setup...] from [Options] on the menu.
4. Then, the [Printers] dialog box appears. Click the printer icon of the property sheet to be displayed.
5. Click the [Setup...] button to show the property sheet.

This method is mainly used when there will be no big changes in the settings once made, such as [Device Option]. It allows you to set the environment in which you will use the printer. The settings made by showing the property sheet from the control panel are valid in all applications.

Displaying a Property Sheet from an Application Menu

1. Select [Print Setup...] from the [File] menu of the application.
2. Then, the Print Setup dialog box appears. Check that the "Default Printer" of "Printer" is "Digital Copier 35cpm PCL5e."
3. Select [Options...] in the Print Setup dialog box. This shows the property sheet.

This method allows you to set the number of copies and paper for each document. The settings made on the property sheet accessed through the application are valid only for that particular application.

TIP
To show a property sheet other than Paper, click the corresponding tab located on the bottom part of the screen.

NOTES

- *The steps to display a property sheet may be different depending on the application. Follow the correct procedure according to the application.*
- *The settings made on the property sheet accessed through the application are valid only for that particular application.*

4. Windows NT 3.51

Operating Environment

This section explains the required environment for the printer driver.
Before installing the printer driver, check that your computer meets the following requirements. If it doesn't, the printer driver may not function properly.

Personal computer		IBM PC or a compatible with an i486DX or higher CPU
Operating system		Windows NT 3.51 (English)
Memory		8MB or more
I/O interface	Parallel	Centronics interface
	Network	10Base-T/2 (UTP/BNC), 10/100BaseT (UTP) ; supported protocols are, IPX/SPX (NetWare 3.1x & 4.x), and TCP/IP (lpr/lpd)
Free space on hard disk		3MB or more

- Windows 95
  For the operating environment and installation procedure for the Windows 95 printer driver, see p. 2-2.

- Windows NT 4.0
  For the operating environment and installation procedure for the Windows NT 4.0 printer driver, see p. 2-16.

- Windows 3.1
  For the operating environment and installation procedure for the Windows 3.1 printer driver, see p. 2-32.

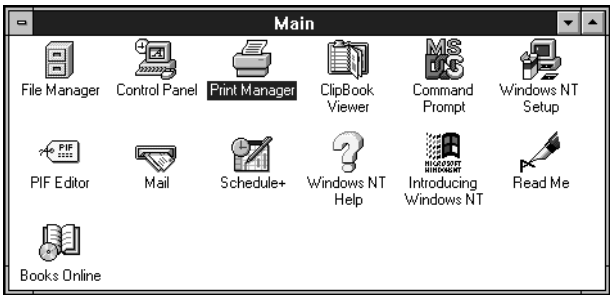
Installation

This section explains the installation procedure for the Windows NT 3.51 printer driver.

NOTE
Before starting to install the printer driver, be sure first to quit all applications.

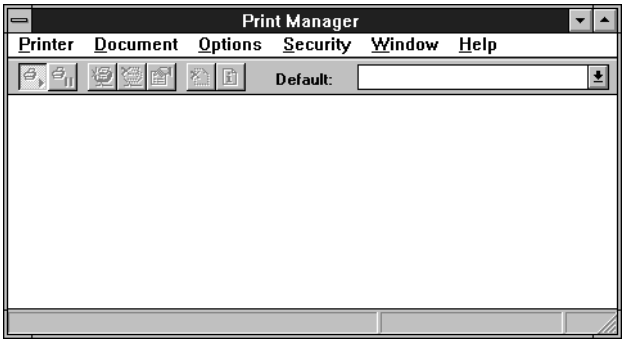
TIP
The following procedure assumes that the machine is a Digital Copier 35cpm and the printer driver is PCL5e.

1. Double-click the "Print Manager" icon, which is located in the "Main" group within the Windows NT 3.51 Program Manager.



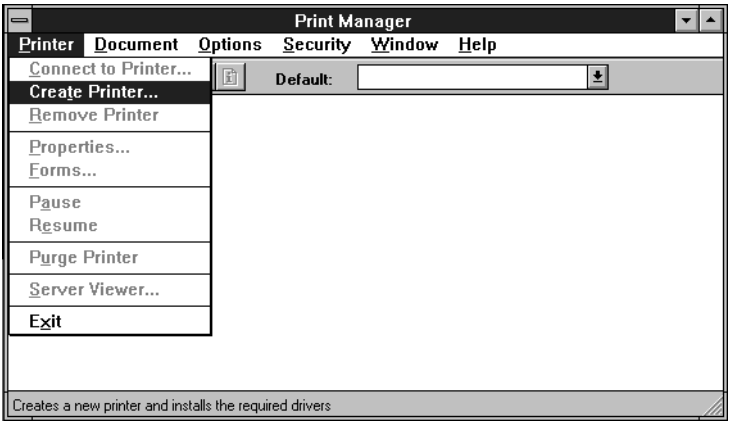
4608P099CA

2. The "Print Manager" dialog box will appear.



4608P100CA

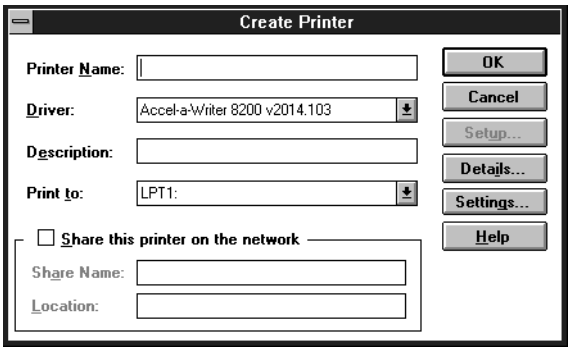
3. If the printer is directly connected to the computer, select "Create Printer..." from the "Printer" menu. If the printer is connected via a network printer server, select "Connect to Printer..."



4608P101CA

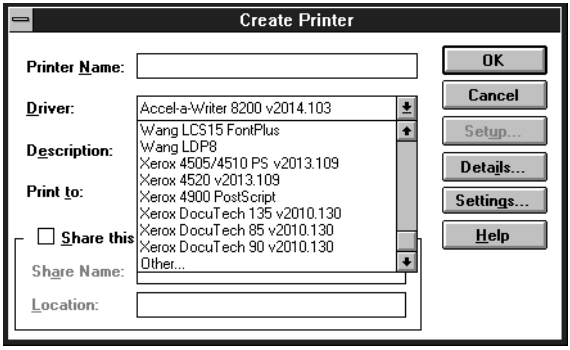
NOTE
When installing the printer driver in a computer connected to the machine via a network, be sure to consult the network administrator.

4. The "Create Printer" dialog box will appear.



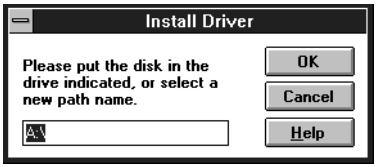
4608P102CA

5. Select "Other..." from the drop-down list of the "Driver" box.



4608P103CA

6. The "Install Driver" dialog box will then appear. Install the printer controller driver CD-ROM that is included with the printer controller in the CD-ROM drive of your computer and change the drive name to the CD-ROM drive.

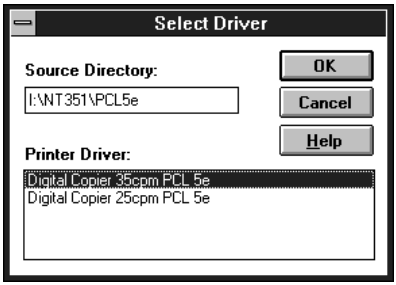


4608P104CA

7. Type the driver on the "Install Driver" dialog box. (As an example, the CD-ROM drive is drive I.)
   Click the [OK] button.
   To install PCL5e: I:\NT351\PCL5e
   To install PS: I:\NT351\PS

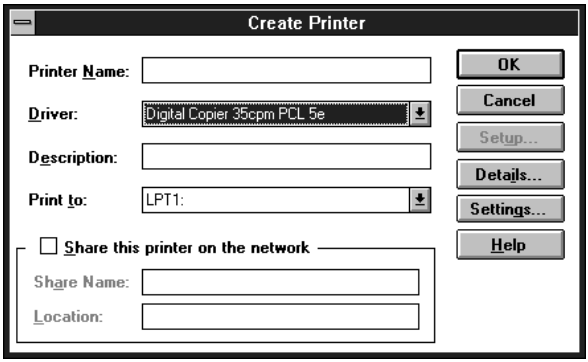
4608P193CB

8. A "Printer Driver" list appears.
   Select the driver to be installed and click the [OK] button.



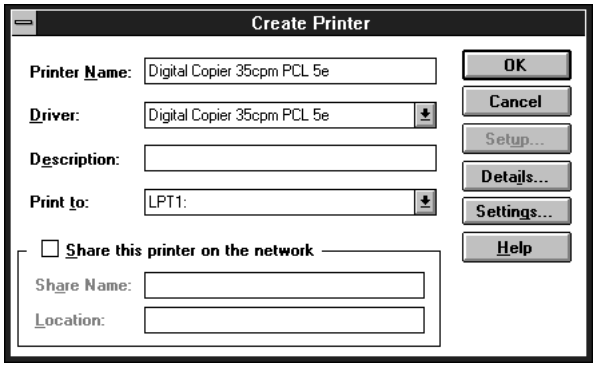
4608P209CA

9. The printer driver name selected is displayed in the "Driver" box on the "Create Printer" dialog box.



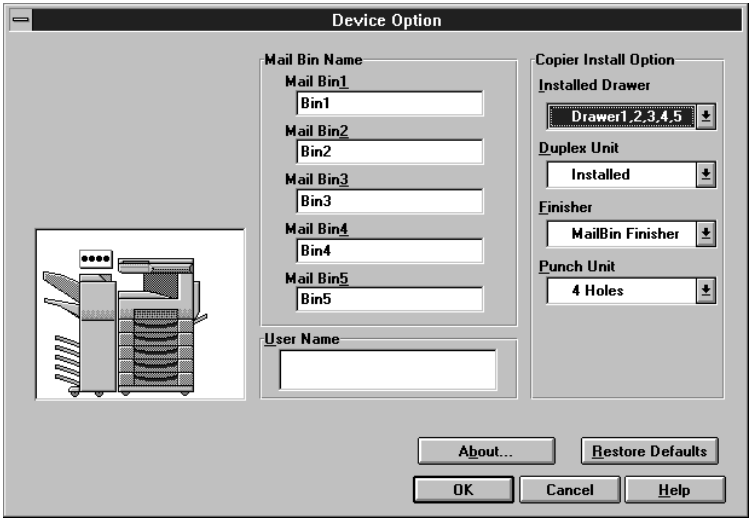
4608P210CA

10. Type any desired printer name in the "Printer Name" edit box and click the [OK] button.



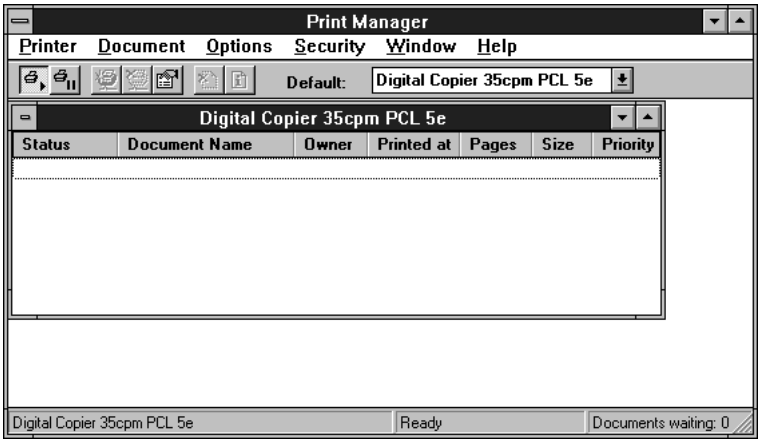
4608P211CA

11. The [Device Option] property sheet will appear. Make the necessary settings and click the [OK] button.



4608P225CA

12. The installed printer driver window will be added to "Print Manager." This completes the installation.



4608P212CA

Making General Settings Before Using the Printer

The printer driver requires setting of items that are common to all print jobs, including the port to which the printer cable is connected and optional devices configured with the machine. To use the machine for printing, settings must be made so that the printer driver developed for these machines can be used. These settings may be made using the "Printer Properties" dialog box, and other dialog boxes which can be opened from it.

The most common settings have already been made when the printer driver is installed, meaning that you do not usually bother to change them. Some items must, however, be changed in the following cases.

Cases where changes are necessary	Applicable property sheet	Ref. page
• The name of the printer to be used is not Digital Copier 35cpm PCL5e.	"Printer Properties"	p.2-49
• The computer's connecting port has been changed • You want to change the conditions for the display of a timeout error • You want to designate a port to which the machine is connected via a network (this setting must be made on a computer connected to the machine via a network)	"Printer Details"	p.2-50

For the details of "Device Option," see Chapter 3.

Displaying a Property Sheet

You have two different steps to take to display a property sheet. The contents of a particular property sheet slightly differ depending on how you access it. Select the appropriate one according to your need.

(1) To display a property sheet from Print Manager
(2) To display a property sheet from an application menu
Below are the detailed procedures for each approach.

Displaying a Property Sheet from Print Manager:

1. Open [Print Manager] from [Main].
2. Then, the [Printers] dialog box appears. Click the printer icon of the property sheet to be displayed.
3. Select "Properties" from the "Printer" menu.

<To display the Device Option screen>
4. Click the [Setup...] button.

<To display a screen other than Device Option>
5. Click the [Details...] button.
6. Click the [Job Defaults...] button.

This method is mainly used when there will be no big changes in the settings once made, such as [Device Option]. It allows you to set the environment in which you will use the printer. The settings made by showing the property sheet from Print Manager are valid in all applications.

Displaying a Property Sheet from an Application Menu

1. Select [Print Setup...] from the [File] menu of the application.
2. Then, the Print Setup dialog box appears, showing the conditions of the printer being used. Check that the "Name" of "Printer" is " Digital Copier 35cpm PCL5e."
3. Select [Properties] in the Print Setup dialog box. This shows the property sheet.

This method allows you to set the number of copies and paper for each document. The settings made on the property sheet accessed through the application are valid only for that particular application.

TIP

To show a property sheet other than Paper, click the corresponding tab located on the bottom part of the screen.

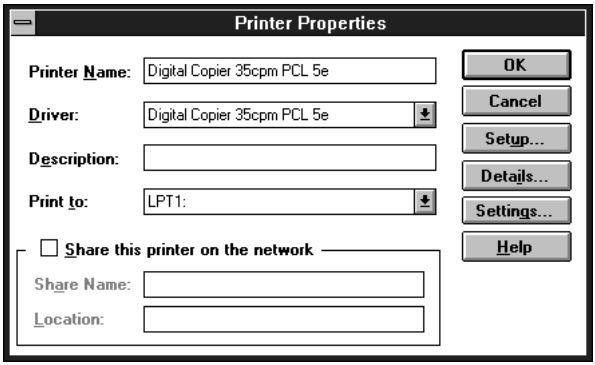
NOTES

- *The steps to display a property sheet may be different depending on the application. Follow the correct procedure according to the application.*
- *The PostScript property sheet of the PostScript driver may be accessed by either one of the following three ways: (1) click the "Print Manager" icon, then choose [Properties] and then [Setup...]; (2) clock the "Print Manger" icon, then choose [Properties], [Details], and then [Job Default]; or, (3) through the application.*
  Note that the contents of the screen accessed through approaches (2) and (3) are the same, while they are different from those of the screen accessed through approach (1).

"Printer Properties" Dialog Box

This dialog box is commonly available to the Windows NT 3.51-based printer drivers.

There is no need of making changes in settings for ordinary operating environments. See Windows NT 3.51 Help for more details.

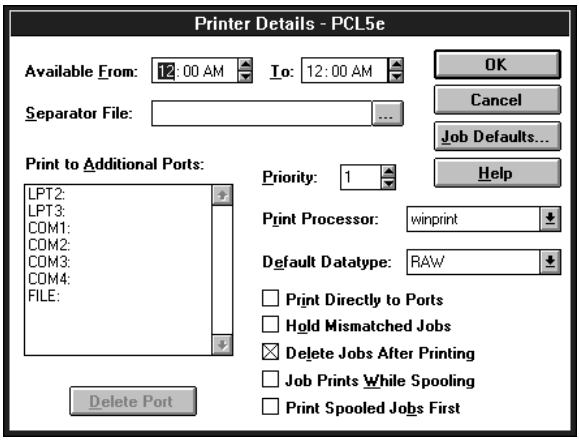


4608P213CA

"Printer Details" Dialog Box

This dialog box is commonly available to the Windows NT 3.51-based printer drivers.

There is no need of making changes in settings for ordinary operating environments. See Windows NT 3.51 Help for more details.



4608P144CA

Chapter 3

Property Sheet

1. Property Sheets

Property Sheets

Each property sheet allows you to make specific settings as detailed below. For a detailed description of each function, see the corresponding reference page.

Property Sheet	Available Settings	Reference Page
"Device Option"	Allows you to make settings for options installed on the machine. * This property sheet is not displayed when Properties has been opened from the application.	p.3-3
"Paper"	Allows you to make basic printer settings such as the number of copies, paper size, print orientation, and the paper source loaded with the paper for printing. It allows you to set enhanced printer functions such as duplex printing, N-in-1 printing, print zoom ratio, and booklet creation. It further allows you to set finishing capabilities including sort, staple, and hole punch when you need to make multiple, complete sets of the original document. Still another feature that can be set is the Administrator Mode.	p.3-5
"Advanced"	Allows you to make settings for advanced functions, such as OHP interleaving, document distribution number, and watermark. It is also possible to lock a print job.	p.3-14
"Graphics"	Allows you to make graphic settings such as resolution, halftone, and image processing method. It also allows you to set TrueType fonts.	p.3-21
"PostScript" (PS driver only)	Allows you to make detailed settings concerning PostScript.	p.3-28
"Setting"	Allows you to save the details of settings made and later load the data for use in print jobs.	p.3-33

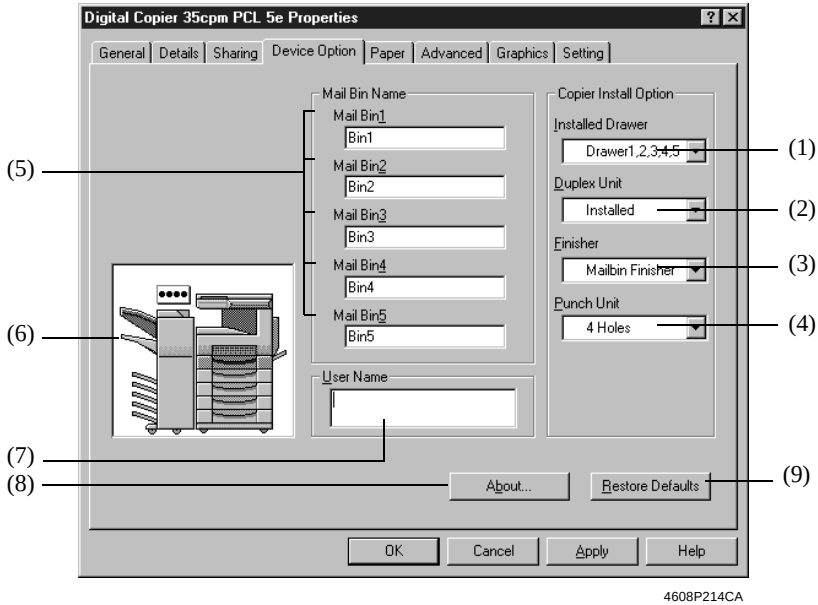
NOTES

- *Refer to Chapter 2 for the procedures to display "Properties."*
- *Different settings must be made depending on the driver involved.*
- *The descriptions contained herein are based on the PCL 5e version driver for Windows 95. Peculiarities of each driver are given at the appropriate place in text as supplementary information.*
- *OS-dependent functions are not detailed.*

2. "Device Option" Property Sheet

Functions of the "Device Option" Property Sheet

The "Device Option" property sheet allows you to set the options installed on the machine. Make sure that the correct settings are made; otherwise, some printer functions may not function properly or printing cannot be performed correctly. The settings should match the machine configuration.



4608P214CA

(1) Installed Drawer
Set the drawer installed in the machine. If the bottommost Drawer is the LCC, select LCC, instead of Drawer 3 or Drawer 4.
Setting values : Drawer 1, 2, Drawer 1, 2, 3, Drawer 1, 2, 3, 4, Drawer 1, 2, 3, 4, 5, Drawer 1, 2 + LCC, Drawer 1, 2, 3 + LCC

(2) Duplex Unit
Set whether the Duplex Unit is installed or not.
Setting values : Installed, Not Installed

(3) Finisher
Set the specifications of the finishing option installed on the machine.
Setting values : Not Installed, Job Tray, Shift Tray, Finisher, Mailbin Finisher

---

NOTE
If Installed Tray has not been properly selected, it may be impossible to select Finisher properly.

---

(4) Punch
Set the number of holes to be made in Hole Punch.
Setting values : 4 Holes

NOTE
The setting depends on the capabilities of the Finisher or Mailbin Finisher, whichever is configured with the system.

---

(5) Mail Bin Name
If the machine is equipped with a Mailbin Finisher, you can name each bin.
Setting values : 1 to 8 characters

(6) Displays the machine preview that represents the configuration of the machine and options.
For preview listing, see p. A-7.

(7) User Name
The user name (up to eight characters) set in the printer driver is displayed as the job user name on the machine's Touch Panel.
Setting value : 8 characters max.

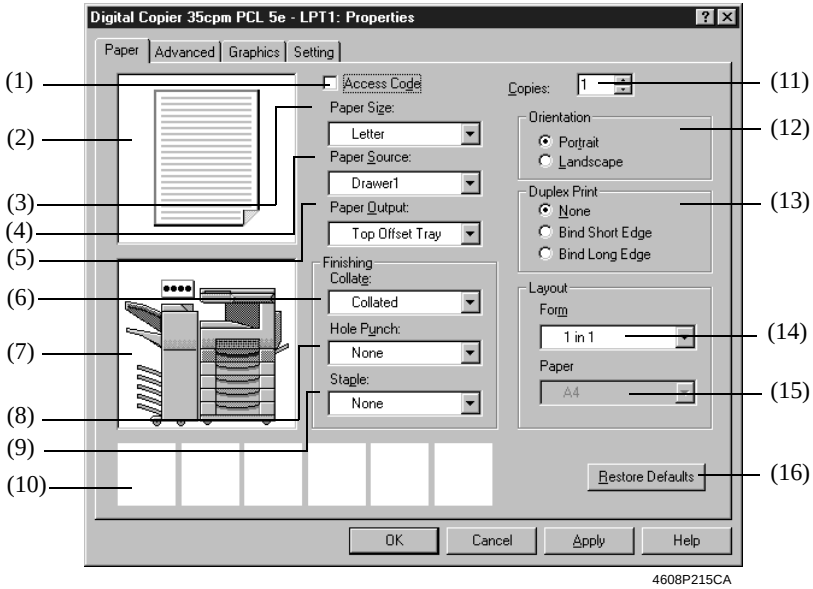
(8) About...
Click to display the manufacturer and version number of the printer driver.

(9) Restore Defaults
Click to restore all settings to the defaults.
Install Drawer : Drawer 1,2
Duplex Unit : Not Installed
Finisher : Not Installed
Punch : 4 Holes
Mail Bin Name : Bin 1~Bin 5

3. "Paper" Property Sheet

Functions of the "Paper" Property Sheet

The "Paper" property sheet allows you to make basic printer settings.



4608P215CA

(1) Access Code
Select this check box when the Administrator Mode is used. An access number is appended to the print job, allowing the machine to keep track of the print job. To use this function, the Copy Track function must be enabled in the machine. When the Copy Track function is enabled in the machine, printing may not be effected unless the correct access number authorized by the machine is entered in Access Number of Security. For more details, see p. 3-13.

(2) Paper preview
Displays the text as it will appear when printed on a sheet of paper. It helps you visualize how N-in-1, duplex, or any other printing function results in the printout.
For a paper preview listing, see p. A-4.

(3) Paper Size
Select the size of the paper to be used for printing.

NOTE
If a paper size that does not match the paper loaded in the machine is selected, the machine will give a message that prompts you to add paper in Drawer1, entering a standby state. If Bypass has been selected, the machine will issue a message that prompts you to load paper in the manual feed port, entering a standby state.

(4) Paper Source
Select the paper source to be used by the machine.
Available options are limited depending on the type of paper source mounted in the machine.
- Auto : Automatically selects the paper source in which paper of the size specified by Paper Size is loaded.
- Drawer 1 to Drawer 5, LCC
  : Prints on paper loaded in the specified paper source (Drawer).
- Bypass : Prints on paper loaded in the Multi Bypass Tray.

NOTES
- *It is possible that an option cannot be selected depending on the paper size. For details, see the Operator's Manual of the machine.*
- *If "OHP Interleaving" or "Cover Mode" is selected, "Paper Source" will appear dimmed.*

TIPS
- *The paper source type is set with Device Option.*
- *The machine preview shows the paper source to be used.*

(5) Paper Output
Select the machine exit tray into which the prints are to be fed.
Available options are limited depending on the type of the finishing option configured with the machine.
- Not Installed : Top Output Bin
- Job Tray : 1st/2nd Tray
- Shift Tray : Shift Tray
- Finisher : TopOffset Tray, Elevator Tray
- Mailbin Finisher : TopOffset Tray, Elevator Tray, bin1 to bin5

NOTE
It is possible that an option cannot be selected depending on the paper size. For details, see the Operator's Manual of the machine.

TIPS
- *The finishing option type is set with Device Option.*
- *The machine preview shows the exit tray to be used.*

(6) Collate
Select whether printed pages are to be sorted into copy sets when printing more than one copy of the same document.
- Collated : Sorts pages into copy sets. For instance, when printing 5 sets of a document consisting of 10 pages, printed pages are sorted by copy (i.e., 5 sets of a 10-page document are output).
- UnCollated : Simply prints the specified number of pages one page at a time. For instance, when printing 5 sets of a document, pages are printed five times, one page at a time.
- Group : Simply prints the specified number of pages which are sorted into groups of the same pages.

NOTE
Be sure to set Collate (Sort) on the application to "OFF" at all times.

TIPS

- *When the machine is equipped with a Shift Tray, or if "Elevator Tray" is selected when the machine is equipped with a Finisher or Mailbin Finisher, sets or stacks are stacked in a sawtooth manner so that each is easy to identify.*
- *If a Job Tray is mounted, or if none of the finishing options is mounted, sets or stacks are stacked in a crisscross manner.*
- *The followings are the minimum requirements for enabling crisscross sorting with the Collated setting:*
  The stacks of paper of the same size are loaded in the lengthwise and crosswise direction.
  Staple, Hole-Punch, or Cover is not set.

(7) Machine preview
The machine preview shows the set paper source and exit tray.
For a listing of machine preview formats, see p. A-7.

(8) Hole Punch <when Finisher or Mailbin Finisher is mounted>
Select whether to punch holes in the printed pages.
- None : Does not punch holes.
- Short Edge : Punches holes along the short edge of the document.
- Long Edge : Punches holes along the long edge of the document.

NOTES

- *It is possible that no holes are made depending on the paper size and the specified hole position. For details, see the Operator's Manual of the machine.*
- *Holes may not be punched if Long Edge is selected with manual feed copying.*

TIPS

- *The number of holes to be made is set with Device Option.*
- *The print preview displays the positions of the holes to be made.*

(9) Staple <when Finisher or Mailbin Finisher is mounted>
Select whether to staple each copy set of the document.
- None : Does not staple the printed pages.
- Corner : Staples each copy set at the upper left corner.

NOTES

- *Select "Elevator Tray" for "Paper Output" when Staple is to be used.*
- *The stapling position varies between the upper left corner and upper right corner depending on the direction of the paper loaded and the printing orientation.*
- *If the number of sheets of paper exceeds the limit that the Finisher or Mailbin Finisher can handle, the stapling function may be canceled.*
- *If the original document for a print job contains a page with a different size from the others and this document is printed, the Staple setting may be canceled.*
- *If the original document for a print job contains a page with a different direction from the others, care should be used because the stapling position is determined according to the direction of the first page.*
- *It is possible that an option cannot be selected depending on the paper size. For details, see the Operator's Manual of the machine.*

TIP

The print preview allows you to check for the stapling position.

(10) Setting preview

Displays the icons corresponding to the settings made for the printer driver. It allows you to identify which functions are currently enabled.
For the setting preview listing, see p. A-9.

(11) Copies

Set the number of copies to be made. Directly type the number, or click [▲] or [▼] to arrive at the desired number.
Setting range : 1 to 999

NOTE

Set "1" in "Copies" when using OHP Interleaving and manual feed copying.

(12) Orientation

Select the orientation of the image. The selected orientation may be checked with the paper preview.

- Portrait : Prints the document across the narrower dimension of the paper.
- Landscape : Prints the document across the wider dimension of the paper.

TIP

The paper preview displays the orientation, either Portrait or Landscape.

(13) Duplex Print <only when Duplex Unit is mounted>

Select the desired duplex print function. The results of the specified duplex print function can be viewed on the paper preview.

- None : Does not perform duplex printing.
- Bind Short Edge : Prints on both sides of each page so that the printed pages can be bound along the short edge.
- Bind Long Edge : Prints on both sides of each page so that the printed pages can be bound along the long edge.

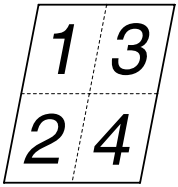
TIPS

- *The paper sizes that permit Duplex Print are Ledger, 11”x14”, Legal, Letter, Executive, A3, A4, A5, B4, B5, FLS1, FLS2, FLS3, and FLS4.*
- *The paper preview shows the result, either Bind Short Edge or Bind Long Edge.*

(14) Form

Set the print layout.

- 1in1 : Prints one page to one full-size sheet of paper.
- 2in1 : Prints two pages to one sheet of paper.
- 4in1 (Vert.) : Prints four pages to one sheet of paper.



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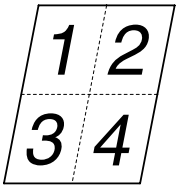
- 4in1 (Horiz.): Prints four pages to one sheet of paper.



4608O002AA

- Zoom : Prints at an enlargement or reduction.
- Booklet : Prints four pages to both sides of a single sheet of paper so that the output page can be folded at the center to form a booklet.

NOTES

• When a document that contains pages of different size and orientation from the rest is printed by Booklet, void or overlapped image could result.

TIP

The paper preview displays the printout layout.

(15) Paper

Specify the output paper size used in 2in1, 4in1, Zoom, and Booklet.

(16) Restore Defaults

Resets all settings on the Paper, Advanced, Graphics, and PostScript property sheets to the defaults.

• Paper property sheet

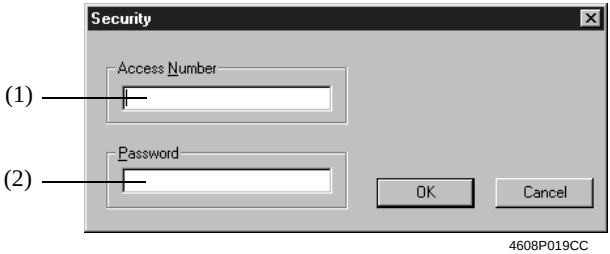
Access Job Number		: Off
Paper Size		: A4
Paper Source		: Auto
Paper Output	(Not installed)	: Top Output Bin
	(Shift Tray)	: Shift Tray
	(Job Tray)	: 1st/2nd Tray
	(Finisher)	: Top Offset Tray
	(Mailbin Finisher)	: Top Offset Tray
Finishing	(Collate)	: Collated
	(Hole Punch)	: None
	(Staple)	: None
Copies		: 1
Orientation		: Portrait
Duplex Print		: None
Layout	(Form)	: 1in1
	(Paper)	: A4

TIPS

- *For the defaults in the Advanced, Graphics, and PostScript property sheets, see "Restore Defaults" of the corresponding property sheet.*
- *For the defaults of the PostScript property sheet of Windows NT 4.0/3.51, see "Restore Defaults" of the property sheet accessed via the application.*

"Security" Dialog Box

This dialog box is used to enter the access number and the password for a Lock Job.



(1) Enter the access number of the job.
Setting value : 0001 to 1000 (4 digits)

(2) Enter the password for the Lock Job.
Setting value : 0000 to 9999 (4 digits)

NOTES

- *If the [Cancel] button is clicked in the Windows 95/3.1 driver, the data is transmitted without specifying Access Code or Lock Job. It is not the cancellation of data transmission.*
- *When Access Code is used, printing may not be effected unless the access number has been correctly set. It is possible, by using the utility that comes with the NIC Board (option), to check on the personal computer screen to see whether the job has been canceled or not.*

Displaying the "Security" Dialog Box

<Windows 95>

The dialog box appears when the [OK] key is clicked on the "Printer" dialog box if "Access Code" or "Lock Job" has been selected.

<Windows NT 4.0/NT 3.51>

The dialog box appears immediately after "Access Code" or "Lock Job" has been selected.

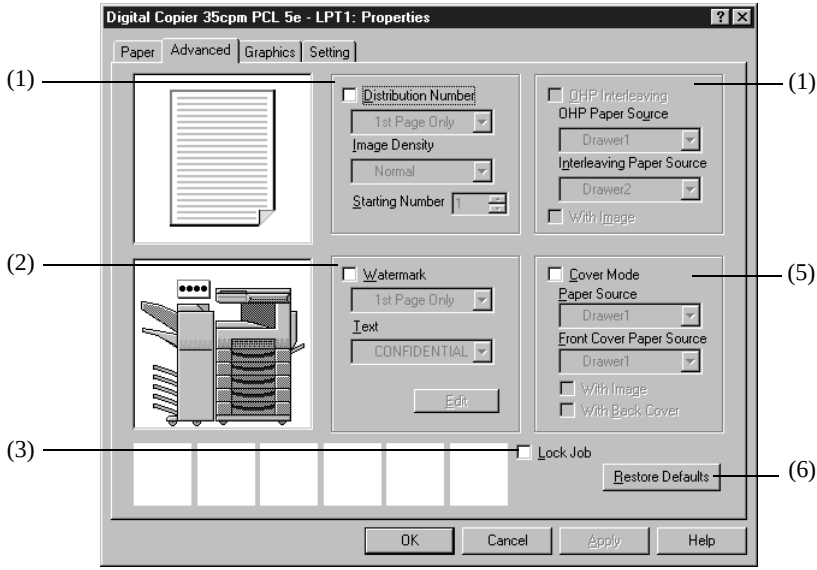
<Windows 3.1>

The dialog box appears when "Print" of "File" is selected if Access Code or Lock Job has been selected.

4. "Advanced" Property Sheet

Functions of the "Advanced" Property Sheet

The "Advanced" property sheet allows you to make advanced printer settings.



4608P216CA

(1) Distribution Number

Select whether to print a distribution number in the background. Other conditions for the distribution number printing may also be specified as detailed below. The distribution number is printed for each set of prints.

- Print page designation : Select whether the distribution number is to be printed on the first page only or every page.
  Setting values : 1st Page Only, All Pages
- Image Density : Set the image density of the distribution numbers.
  Setting values : Normal, Darker, Lighter
- Starting Number : Specify the starting distribution number.
  Setting range: 001 to 999

NOTE

When this function is used in combination with Cover Mode and, if "With Image" is not selected under Cover Mode and "All Pages" is selected under this function, the distribution number is printed on the cover.

TIPS

• The setting preview shows the corresponding icon.

• The distribution number is reset to 000 upon reaching 999.

(2) Watermark

Allows you to print specific characters as a watermark in the background. The selected watermark can be viewed in the print preview on the left.

- Print page designation: Select whether to print the watermark on the first page only or on every page.
  Setting values :1st Page Only, All Pages
- Text : Select the desired characters from the text list.
  Setting values : CONFIDENTIAL, COPY, DRAFT, FILE COPY, FINAL, PROOF, TOP SECRET, WaterMark1 ~ WaterMark5
- [Edit] button : Displays the "Watermark" dialog box that allows you to set the style or position of the watermark. For more details, see p. 3-19

NOTE

When this function is used in combination with Cover Mode and, if "With Image" is not selected under Cover Mode and "1st Paper Only" is selected under this function, the watermark is printed on the second page.

TIP

The setting preview shows the corresponding icon.

(3) Lock Job

Select this box if you want to lock a print job.
To use Lock Job, enter a password in Password of Security.
For details, see p. 2-13.
The locked print job may be printed when unlocked on the Job List display available on the machine, at which time, an authorized password is necessary.

(4) OHP Interleaving

When printing on several sheets of OHP transparencies at one time, it is a good idea to insert a sheet of paper between sheets of OHP transparencies. This paper may be left blank or have the same data printed on it as the OHP transparencies.

- OHP Paper Source : Select the paper source from which to feed OHP transparencies.
  Setting values : Drawer 1, Bypass
- Interleaving Paper Source : Select the paper source from which to feed interleaves.
  Setting values : Drawer 1 to Drawer 5, LCC
- with Image : Select this box if you want the OHP data printed on the interleaves.

NOTES

- *Set "1" in "Copies" when using OHP Interleaving.*
- *The same paper source cannot be selected for "OHP Paper Source" and "Interleaving Paper Source."*
- *Applicable paper sizes are "A4 & B5".*

TIPS

- *The machine preview shows the paper source for OHP transparencies and that for interleaves.*
- *"Paper Source" on the "Paper" property sheet appears dimmed and becomes unavailable when "OHP Interleaving" is selected.*
- *The setting preview shows the corresponding icon.*

---

(5) Cover Mode

Lets you place a front cover and a back cover in each of your copy sets. The front cover may be left blank or have data printed on it.

- Paper Source : Select the paper source for the text pages.
  Setting values : Drawer 1 to Drawer 5, LCC
- Front Cover Paper Source : Select the paper source for the front and back covers.
  Setting values : Drawer 1 to Drawer 5, LCC
- with Image : Select this box if you want data printed on the front cover.
- with Back Cover : Select this box if you want a back cover.

NOTE

If thick paper or other special paper is selected, the machine may not feed prints out into the selected exit tray.

TIPS

- *No data will be printed on the back cover if selected even when you select to print data on the front cover.*
- *The machine preview shows the paper source for the text pages and that for front and back covers.*
- *"Paper Source" on the "Paper" property sheet appears dimmed and becomes unavailable when "Cover Mode" is selected.*
- *The setting preview shows the corresponding icon.*

(6) Restore Defaults

Resets all settings on the Paper, Advanced, Graphics, and PostScript property sheets to the defaults.

• Advanced property sheet

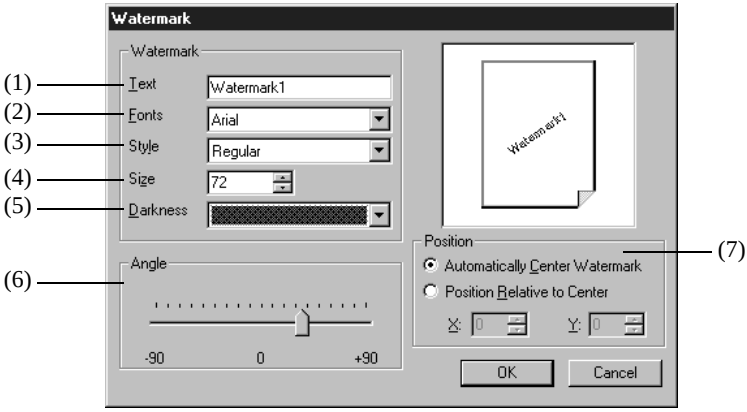
Distribution Number	: Off
	: 1st Page Only
(Image Density)	: Normal
(Starting Number)	: 1
Watermark	: Off
	: 1st Page Only
(Text)	: CONFIDENTIAL
OHP Interleaving	: Off
(OHP Paper Source)	: Drawer1
(Interleaving Paper Source)	: Drawer2
(with Image)	: Off
Cover Mode	: Off
(Paper Source)	: Drawer1
(Front Cover Paper Source)	: Drawer1
(with Image)	: Off
(with Back Cover)	: Off

TIPS

- *For the defaults in the Paper, Graphics, and PostScript property sheets, see "Restore Defaults" of the corresponding property sheet.*
- *For the defaults of the PostScript property sheet of Windows NT 4.0/3.51, see "Restore Defaults" of the property sheet accessed via the application.*

"Watermark" Dialog Box

The "Watermark" dialog box allows you to select the text to be inserted by the Watermark function and its style. Select text of "Watermark" on the "Advanced" property sheet and click the [Edit] button to show the "Watermark" dialog box.



(1) Text

Edit the text to be printed as the watermark.
No. of settings available : 5 (Watermark1 to Watermark5)
No. of characters : Within 63

TIP

Only the text for Watermark1 to Watermark5 can be edited. The set phrases of CONFIDENTIAL, COPY, DRAFT, FILE COPY, FINAL, PROOF, and TOP SECRET cannot be edited.

---

(2) Fonts

Specify the font of the text to be printed as the watermark.
When PCL5e is being used with Windows 95, 3.1, or NT 4.0, select one from among those installed in the OS (PC fonts).
When PCL6 or PS is being used with Windows 95, 3.1, or NT 4.0, or when Windows NT 3.51 is being used, select one from among those installed in the controller.

(3) Style
Specify the font style of the text to be printed as the watermark.
Setting value : Regular, Bold, Italic, Bold Italic

(4) Size
Specify the font size of the text to be printed as the watermark.
Setting value : 4 to 127 pt (step: 1 pt)

(5) Darkness
Specify the image density of the text to be printed as the watermark.
Setting value : Image density corresponding to 0 to 10 (step 1)

(6) Angle
Specify the angle of the text to be printed as the watermark. The specified angle can be viewed in the print preview on the right.
Setting value : -90 to +90 (-: clockwise; 0: horizontal; +: counterclockwise)

(7) Position
Specify the position of the text to be printed as the watermark.
• Automatically Center Watermark : Prints the watermark at the center of the page.
• Position Relative to Center : Prints the watermark at a position defined by the numerical values entered in the X and Y boxes. The specified position can be viewed in the print preview on the right.
Setting value X: -200 to 200 (step: 1)
Y: -200 to 200 (step: 1)

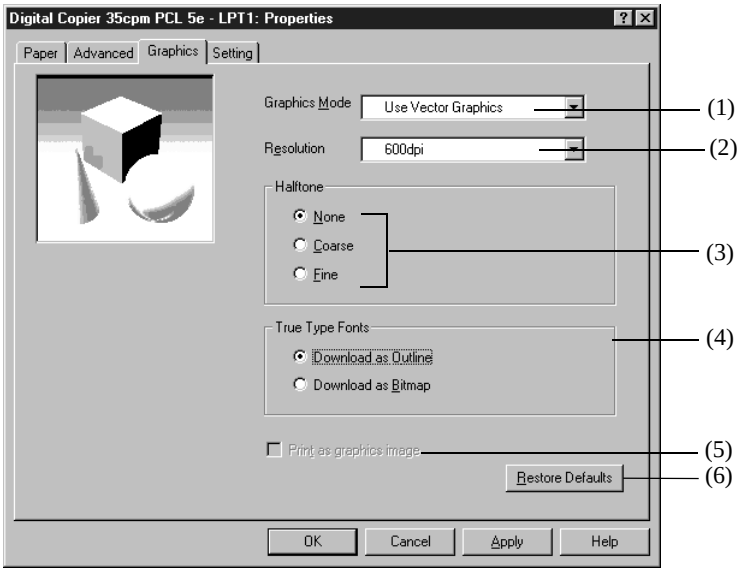
TIP
For position, specify the distance from the center. The + direction in X is towards the right, while the + direction in Y is upwards.

5. "Graphics" Property Sheet

The "Graphics" property sheet allows you to make graphic settings such as resolution, halftone, print image density, and image processing method.

Functions of the "Graphics" Property Sheet

Property Sheet for PCL5e



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(1) Graphics Mode
Select the graphic image type, either vector or raster.
- Use Vector Graphics : Transmits the data as vector graphics.
- Use Raster Graphics : Expands vector graphics data to transmit bit-mapped graphics data.

NOTE
Use Raster Graphics cannot be used in 2in1, 4in1, Zoom, and Booklet.

---

(2) Resolution
Select the desired print resolution.
Setting value : 600 dpi

(3) Halftone
Allows you to select the desired gray-scale dithering method.
- None : Does not perform dithering. Print results will have no gray gradation.
- Coarse : Performs coarse dithering. It is effective when a mixture of graphics and text is printed on paper with a rough surface.
- Fine : Performs dithering using dots. Select this option if the document contains gray areas.

(4) TrueType fonts
Specify the print method of TrueType fonts.
- Download as Outline: Transmits the data in the outline format if the corresponding font is not available.
- Download as Bitmap: Transmits the data in bit-map format if the corresponding font is not available.

NOTE
This setting is valid if "Print as Graphics image" is OFF.

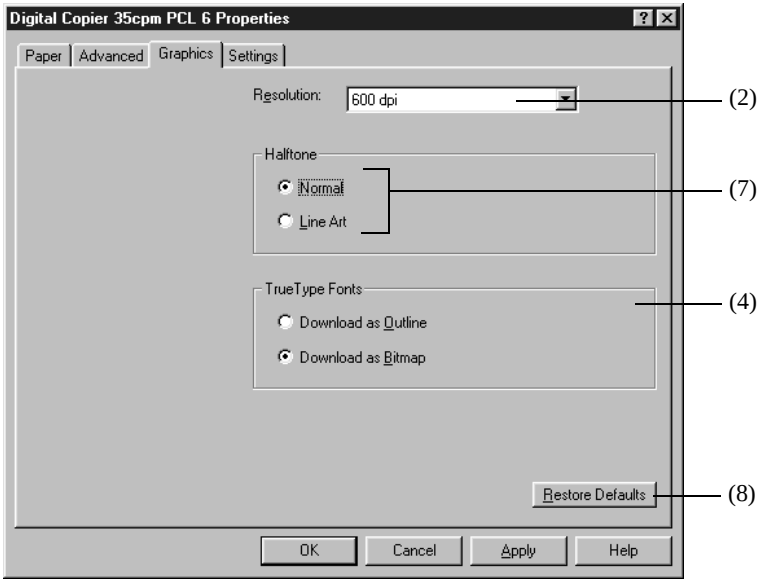
(5) Print text as graphics image
Transmits all data in the bit-map format.

(6) Restore Defaults
Resets all settings on the Paper, Advanced, and Graphics property sheets to the defaults.
- Graphics property sheet

Graphics Mode	: Use Vector Graphics
Resolution	: 600 dpi
Halftone	: Fine
TrueType Fonts	: Download as Outline
Print as Graphics image	: Off

TIP
For the defaults in the Paper, Advanced, and PostScript property sheets, see "Restore Defaults" of the corresponding property sheet.

Property Sheet for PCL6



(2) Resolution
See the description for the PCL5e version.

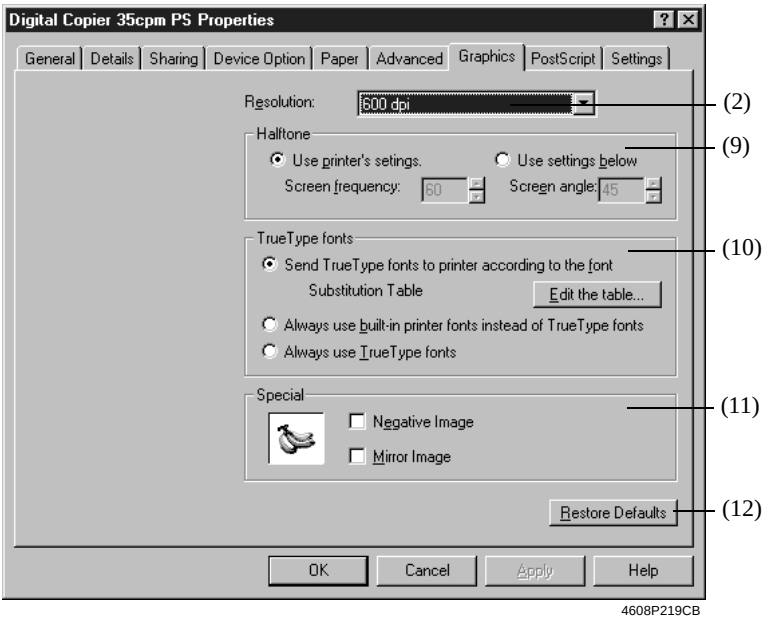
(4) TrueType fonts
See the description for the PCL5e version.

(7) Halftone
Allows you to select the desired gray-scale dithering method.
- Normal : Does not perform dithering. Print results will have no gray gradation.
- Line Art : Performs dithering using lines. Select this option if the document contains clear borders between white, black, and gray shadings like line-drawings.

(8) Restore Defaults
Resets all settings on the Paper, Advanced, and Graphics property sheets to the defaults.
• Graphics property sheet
Resolution : 600 dpi
Halftone : Normal
TrueType Fonts : Download as Outline

TIP
For the defaults in the Paper, Advanced, and PostScript property sheets, see "Restore Defaults" of the corresponding property sheet.

Property Sheet for Windows 95/3.1 PS



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(2) Resolution
See the description for the PCL5e version.

(9) Halftone

Allows you to select the desired gray-scale dithering method.

- Use Printer's settings: Uses the settings made on the printer.
- Use settings below : Set the number of lines per inch and the angle of pattern. Adjust these settings if Moiré occurs when printing a fine image such as a photo.

  Screen frequency

  Set the number of lines for the screen.

  Setting value : 1 to 600 (step: 1)

  Screen angle

  Set the angle for the screen.

  Setting value : 1 to 360 (step: 1)

NOTE

Usually, use the default values.

---

(10) TrueType fonts

- Send TrueType fonts to printer according to the font
  : Transmits TrueType fonts according to table correspondence.
  [Edit the table...]: <Only when opened from the control panel>
  Displays a screen on which the system fonts (Device fonts) are assigned to the PC fonts (TrueType fonts).
- Always use built-in printer fonts instead of TrueType fonts
  : Uses the printer fonts at all times.
- Always use TrueType fonts: Transmits the TrueType fonts at all times.

(11) Special

Specify reversal of toner arrangement between black and white and mirror image.

- Negative Image: Reverses toner arrangement between black and white.
- Mirror Image : Reverses the image as if the original were viewed in a mirror.

(12) Restore Defaults

Resets all settings on the Paper, Advanced, Graphics, and PostScript property sheets to the defaults.

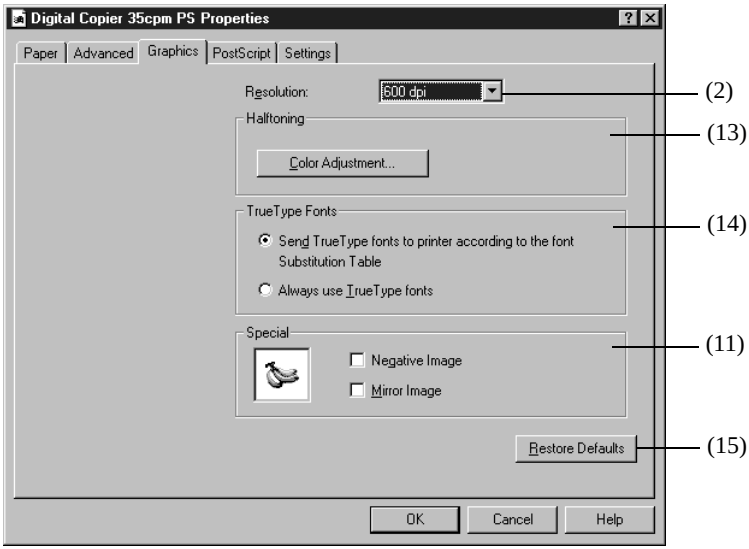
• Graphics property sheet

Resolution		: 600 dpi
Halftone		: Use Printer's settings
	(Screen frequency)	: 60
	(Screen Angle)	: 45
TrueType Fonts		: Send True Type fonts to printer according to the font
Special	(Negative Image)	: Off
	(Mirror Image)	: Off

TIP

For the defaults in the Paper, Advanced, and PostScript property sheets, see "Restore Defaults" of the corresponding property sheet.

Property Sheet for Windows NT 4.0/NT 3.51 PS



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(2) Resolution
See the description for the PCL5e version.

(11) Special
See the description for the Windows 95/3.1 PS version.

(13) Halftone [Color Adjustment...]
Displays the color adjustment dialog box.
The color adjustment dialog box is a Windows NT function. For details, see the documentation provided for Windows NT.

(14) TrueType Fonts
- Send TrueType fonts to printer according to the font
  : Transmits TrueType fonts according to table correspondence.
- Always use TrueType fonts: Transmits the TrueType fonts at all times.

(15) Restore Defaults
Resets all settings on the Paper, Advanced, Graphics, and PostScript property sheets to the defaults.
- Graphics property sheet

Resolution		: 600 dpi
TrueType Fonts		: Send True Type font to printer according to the font.
Special	(Negative Image)	: Off
	(Mirror Image)	: Off

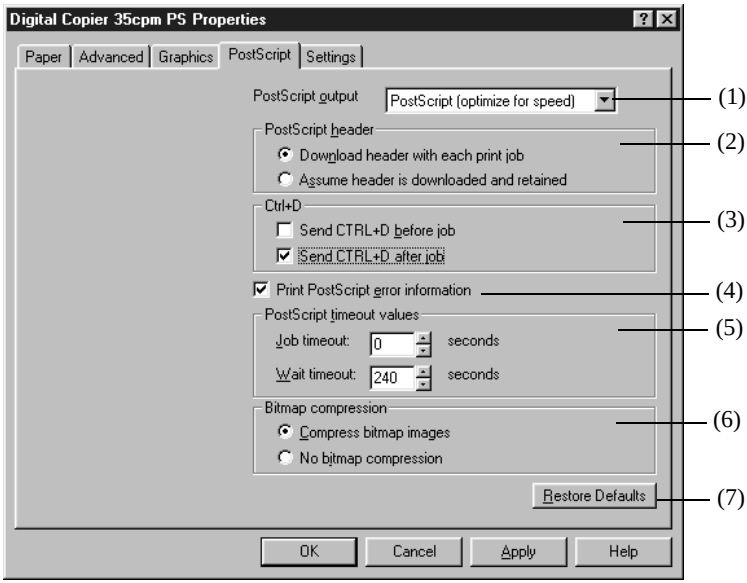
TIPS
- *For the defaults in the Paper, Advanced, and PostScript property sheets, see "Restore Defaults" of the corresponding property sheet.*
- *For the PostScript property sheet, see "Restore Defaults" of the property sheet accessed via the application.*

6. "PostScript" Property Sheet

The "PostScript" property sheet allows you to make overall settings as they relate to PostScript.

Functions of the "PostScript" Property Sheet

Property Sheet for Windows 95/3.1 PS



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(1) PostScript output format
Set the output format of PostScript.
- PostScript : Optimizes for faster printing process.
- Encapsulated, PostScript (EPS): Describes an image or page contained within a file and places the file within another application for printing.

(2) PostScript header
Set the method of transmitting the header.
- Download header with each print job
  : Transmits header information for each print job. It is recommended when sharing a network printer.
- Assume header is downloaded and retained
  : Transmits header information only once to the printer, thereby shortening the print time.

(3) Ctrl+D
Informs the machine of the start and completion of the current print job.
- Send CTRL+D before job : Send Ctrl+D before the job.
- Send CTRL+D after job : Send Ctrl+D after the job.

(4) Print PostScript error information
Check this box to print PostScript error information.

(5) PostScript timeout values
Set the timeout of the printer.
- Job timeout : Set the timeout value for a job.
  Setting value : 0 to 999 (step: 1)
- Wait timeout : Set the timeout value for job wait.
  Setting value : 0 to 999 (step: 1)

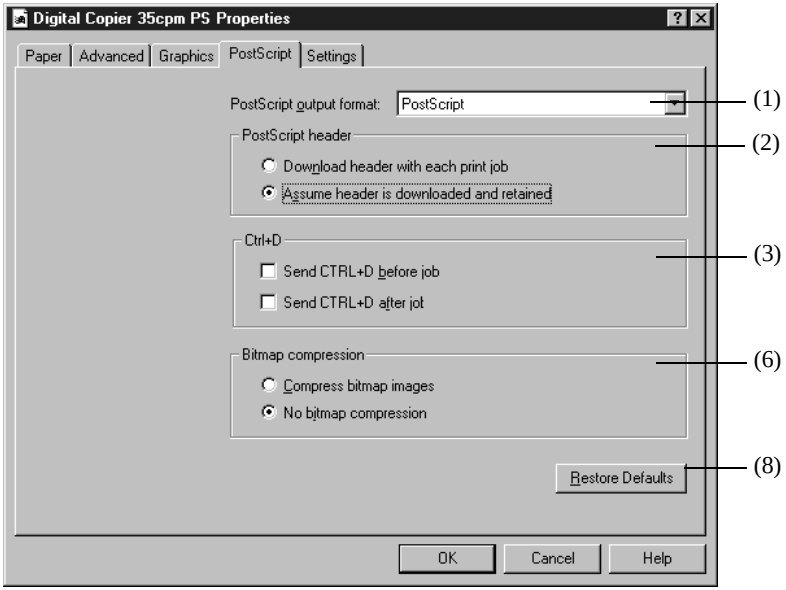
(6) Bitmap compression
Specify whether to perform bitmap compression or not.
- Compress bitmap image : Transmits graphics data after compressing it.
- No bitmap compression : Transmits graphics data without compressing it.

(7) Restore Defaults
Resets all settings made on the Paper, Advanced, Graphics, and PostScript property sheets to the defaults.
- PostScript property sheet

PostScript output format	: PostScript
PostScript header	: Download header with each print job
Ctrl+D (Send CTRL+D before job)	: Off
(Send CTRL+D after job)	: Off
Print PostScript error information	: On
PostScript Timeout values	
(Job Timeout)	: 0
(Wait Timeout)	: 240
Bitmap Compression	: Compress bitmap images

TIP
For the defaults in the Paper, Advanced, and Graphics property sheets, see "Restore Defaults" of the corresponding property sheet.

Property sheet accessed from a Windows NT 4.0/NT 3.51 PS application



4608P222CA

(1) PostScript Output Format
See the Windows 95/3.1 PS version.

(2) PostScript Header
See the Windows 95/3.1 PS version.

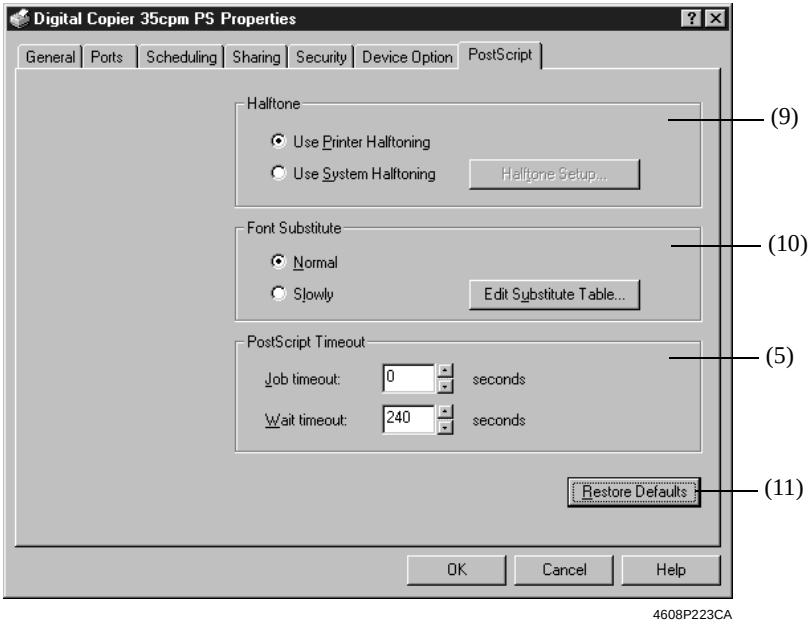
(3) Ctrl+D
See the Windows 95/3.1 PS version.

(6) Bitmap Compression
See the Windows 95/3.1 PS version.

(8) Restore Defaults
Resets all settings made on the Paper, Advanced, Graphics, and PostScript property sheets to the defaults.
• PostScript property sheet
PostScript Output Format : PostScript
PostScript Header : Download header with each print job
Ctrl+D (Send CTRL+D before job) : Off
(Send CTRL+D after job) : Off
Bitmap Compression : Compress bitmap images

TIP
For the defaults in the Paper, Advanced, and Graphics property sheets, see "Restore Defaults" of the corresponding property sheet.

Property sheet accessed from a Windows NT 4.0/NT 3.51 PS control panel



4608P223CA

(5) PostScript Timeout values
See the Windows 95/3.1 PS version.

(9) Halftone
Set the halftoning.
- Use Printer Halftoning : Uses the printer setting.
- Use System Halftoning : Uses the unique setting made by the user.
- Halftone Setup... : Displays the device color/halftone property dialog box.
  A Windows NT function is used. For details, see the documentation provided for Windows NT.

(10) Font Substitute
Set font substitution.
- Normal : Substitutes PostScript fonts for all TrueType fonts. A shorter printing time results since the TrueType fonts are not downloaded at printing. There may, however, be some discrepancies in fonts between what you see on the screen and what you get on printout.
- Slowly : Downloads TrueType fonts at printing. So, there is an accurate font correspondence between what you see on the screen and what you get on printout. A longer printing time could result.
- Edit Substitute Table... : Opens the TrueType font to printer font correspondence table.

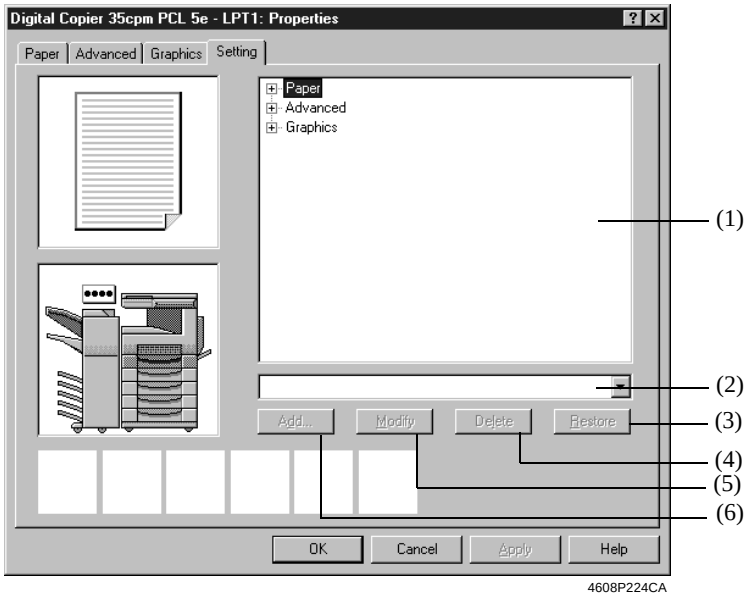
(11) Restore Defaults
Resets all settings to the defaults.
Halftone : Use Printer Halftoning
Font Substitute : Normal
PostScript timeout values
(Job Timeout) : 0
(Wait Timeout) : 240

TIP
The settings on other property sheets are not reset to defaults.

7. "Settings" Property Sheet

Functions of the "Settings" Property Sheet

The "Settings" property sheet allows you to save the changes made to the settings or view the saved or current settings.



4608P224CA

(1) Setting
Displays the settings selected in Title in a tree form.

(2) Title
Displays the title given to the settings programmed in the printer driver.

(3) [Restore] button
Click this button to change the current printer driver settings to those selected in Title.

NOTE
The Device Option values of those options marked with f in Title are different from what are stored and they cannot be restored.

---

(4) [Delete] button
Click this button to delete the settings selected in Title.

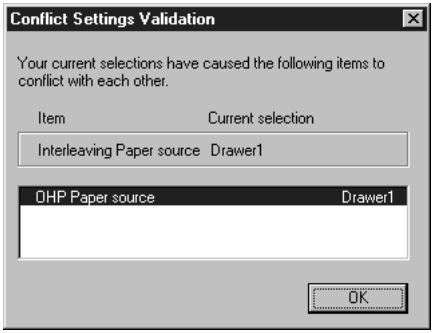
(5) [Modify] button
Click this button to replace the saved value with the current setting value.

(6) [Add...] button
Click this button to save the current settings.

8. "Conflict Settings Validation" Dialog Box

"Conflict Settings Validation" Dialog Box

The "Conflict Settings Validation" dialog box, like the one as shown below, appears when a setting, which conflicts with another made previously, is made on a property sheet.



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When the "Conflict Settings Validation" dialog box appears, it shows the details of the setting that conflicts with another. Go over the details and click the [OK] button to quit. This brings you back to the previous setting. Now, make a new setting that is compatible with the other one.

8. "Conflict Settings Validation" Dialog Box

Chapter 4

Convenient Functions

1. Convenient Functions

Convenient Functions

In this chapter, you will learn how to print your document, guiding you through steps from start to end of printing. WordPad, a Windows 95 standard application, is used as an example to show the steps to follow using the Windows 95 PCL 5e version driver. Though the screen format differs from one driver to another, the procedure may be used as reference for a driver other than the Windows 95 PCL 5e. If a different procedure is applicable to a specific driver, that is included with the text.

TIPS

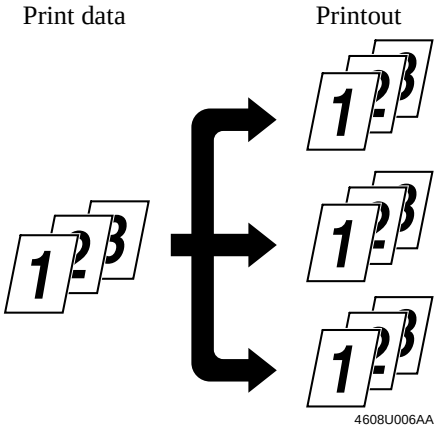
- *Different procedures apply to start a property sheet depending on the application. This chapter is concerned only with the procedure to be used with WordPad.*
- *A single application may offer two or more different procedures to follow to open a property sheet. If, for example, WordPad is used on the Windows 95 PCL 5e driver, the text that follows instructs you to open a property sheet by opening the Print dialog box with "Print" in the "File" menu. Another procedure that may be used is: Open the Page Setup dialog box with "Page Setup" in the "File" menu, and then click the [Printer] button to open the Page Setup dialog box before opening a property sheet.*

---

2. Printing More Than One Copy at a Time

Overview

This section explains how to print two or more copies of a document that has been created with an application. Most applications allow this function to be executed from the Print dialog box. The steps described in the following are used to print more than one copy and make complete sorted sets of a document by using the Sort function offered by the printer driver.



Procedure

1. Start printing from the application which has been used to create the document. Normally, printing can be started by selecting "Print" from the "File" menu.

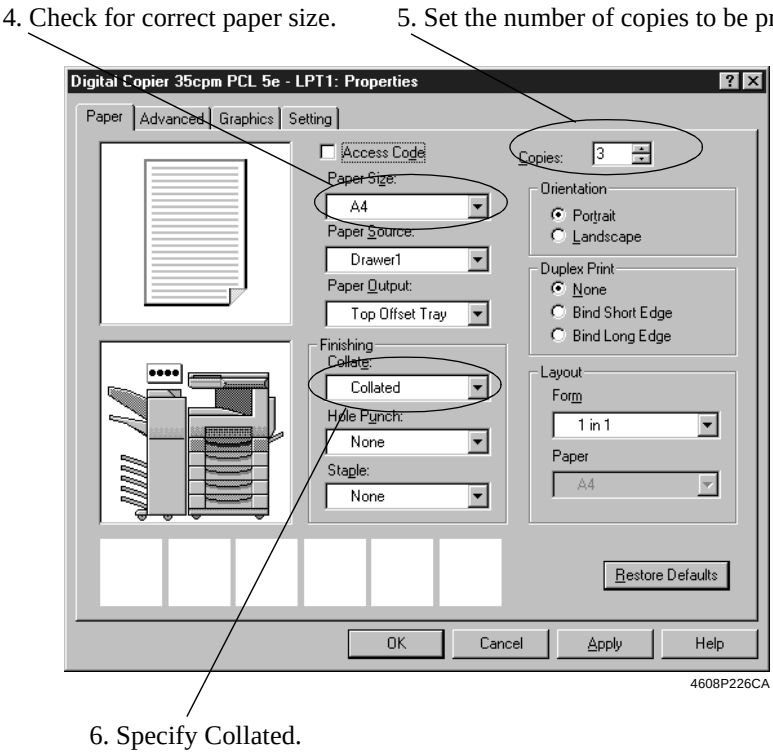
2. The Print dialog box will appear.
   Check that "Digital Copier 35cpm PCL5e" is displayed for "Name" under "Printer" and click the [Properties] button.

NOTE
Some applications allow you to set Copies and Collate (Sort) in the Print dialog box. To ensure proper printing operation, however, turn OFF these items of the application and make the necessary settings in each property sheet of the printer driver.

---

3. The "Digital Copier 35cpm PCL5e Properties" dialog box will appear.
   If the "Paper" property sheet is not displayed, click the "Paper" tab.

4. Check that the size of the document created with the application is displayed in "Paper Size."



5. In "Copies," set the number of copies to be printed.

6. In "Collate" under "Finishing," select Collated so that the printed pages are sorted into copy sets.

TIP

If UnCollated or Group is selected, printed pages will be sorted into groups of the same pages.

---

7. Make other settings as necessary and click the [OK] button.

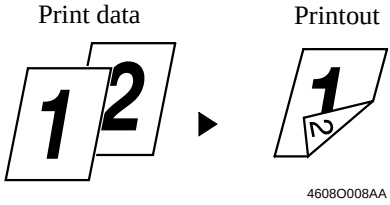
8. In the Print dialog box that will then reappear, click the [OK] button. Then, the data will be transferred to the machine and printing will soon start

3. Printing on Both Sides of the Paper

Overview

This section explains how to print a multi-page document which has been created with an application using both sides of a sheet of paper. It also shows the steps to be followed when stapling the two-sided pages.

To use this function, a Duplex Unit must be mounted on the machine.



Procedure

1. Start printing from the application which has been used to create the document. Normally, printing can be started by selecting "Print" from the "File" menu.

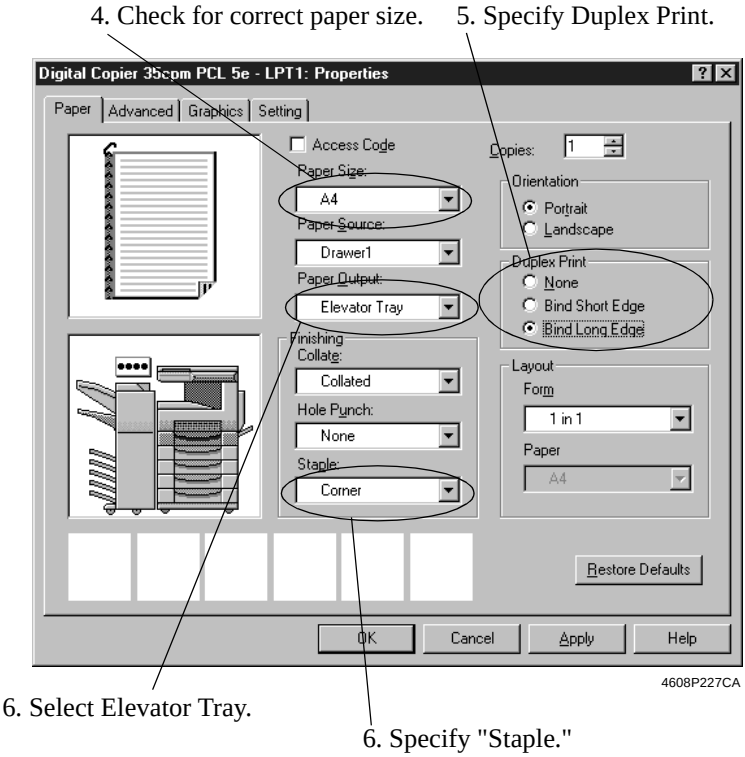
2. The Print dialog box will appear.
   Check that "Digital Copier 35cpm PCL5e" is displayed for "Name" under "Printer" and click the [Properties] button.

NOTE
Some applications allow you to set Copies and Collate (Sort) in the Print dialog box. To ensure proper printing operation, however, turn OFF these items of the application and make the necessary settings in each property sheet of the printer driver.

---

3. The "Digital Copier 35cpm PCL5e Properties" dialog box will appear.
   If the "Paper" property sheet is not displayed, click the "Paper" tab.

4. Check that the size of the document created with the application is displayed in "Paper Size."



5. Select "Bind Long Edge" or "Bind Short Edge" from "Duplex Print."

   If "Bind Long Edge" is selected, printing will be performed on both sides of each page so that the printed pages form a book when they are bound along the long edge. If "Bind Short Edge" is selected, printing will be performed on both sides of each page so that the printed pages form a book when they are bound along the short edge.

"Bind Long Edge"

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"Bind Short Edge"

4608O009AA

TIP
The print preview shows which edge is to be bound.

6. If you want to staple the printed pages, select "Elevator Tray" for "Paper Output" and then specify "Corner" in "Staple" under "Finishing."

NOTES
- *When "Bind Long Edge" is selected, "Short Edge" cannot be selected for punch holes.*
- *When "Bind Short Edge" is selected, "Long Edge" cannot be selected for punch holes.*

TIP
To make holes in the printed pages for filing, select "Long Edge" or "Short Edge" in "Hole Punch" under "Finishing."

7. Make other settings as necessary and click the [OK] button.

8. In the Print dialog box that will then reappear, click the [OK] button. Then, the data will be transferred to the machine and printing will soon start.

4. Specifying the Exit Port

Overview

It is possible to specify a particular print exit port when the Finisher, or Mailbin Finisher is being used. The following explains how to feed printed pages into the Elevator Tray of the Mailbin Finisher.

Procedure

1. Start printing from the application which has been used to create the document. Normally, printing can be started by selecting "Print" from the "File" menu.

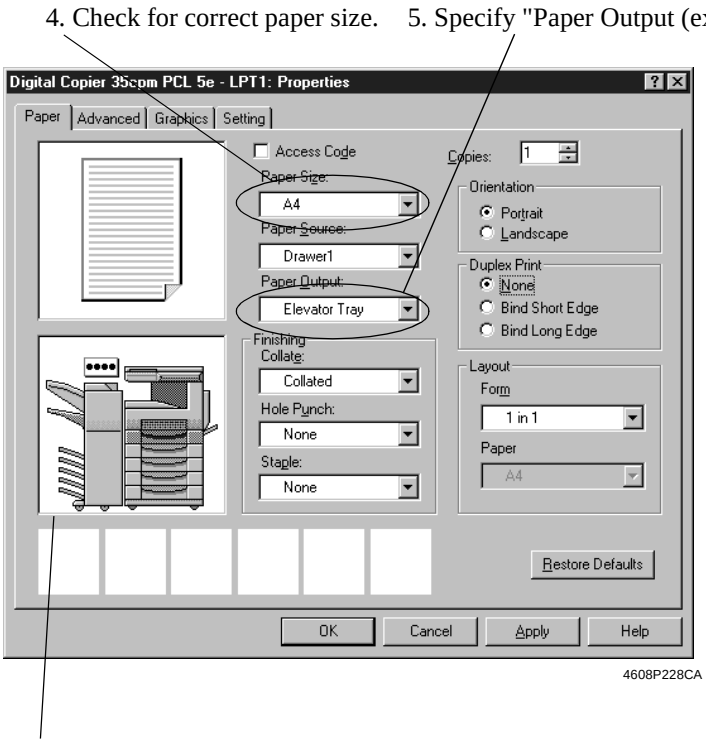
2. The Print dialog box will appear.
   Check that "Digital Copier 35cpm PCL5e" is displayed for "Name" under "Printer" and click the [Properties] button.

NOTE
Some applications allow you to set Copies and Collate (Sort) in the Print dialog box. To ensure proper printing operation, however, turn OFF these items of the application and make the necessary settings in each property sheet of the printer driver.

---

3. The "Digital Copier 35cpm PCL5e Properties" dialog box will appear.
   If the "Paper" property sheet is not displayed, click the "Paper" tab.

4. Check that the size of the document created with the application is displayed in "Paper Size."



5. Select Elevator Tray in "Paper Output."
   The machine preview shows the exit port selected.

6. Make other settings as necessary and click the [OK] button.

7. In the Print dialog box that will then reappear, click the [OK] button. Then, the data will be transferred to the machine and printing will soon start.

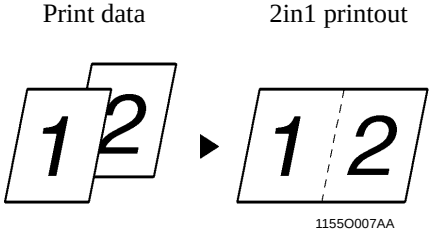
NOTE
The exit ports available for selection are limited depending on the paper and functions to be used. For more details, see the Operator's Manual of the machine.

---

5. Specifying N-in-1 Printing

Overview

This section explains how to print two pages on one side of a sheet of paper (2in1). The same procedure is applicable when you want to print four pages on one side of a sheet of paper (4in1).



Procedure

1. Start printing from the application which has been used to create the document. Normally, printing can be started by selecting "Print" from the "File" menu.

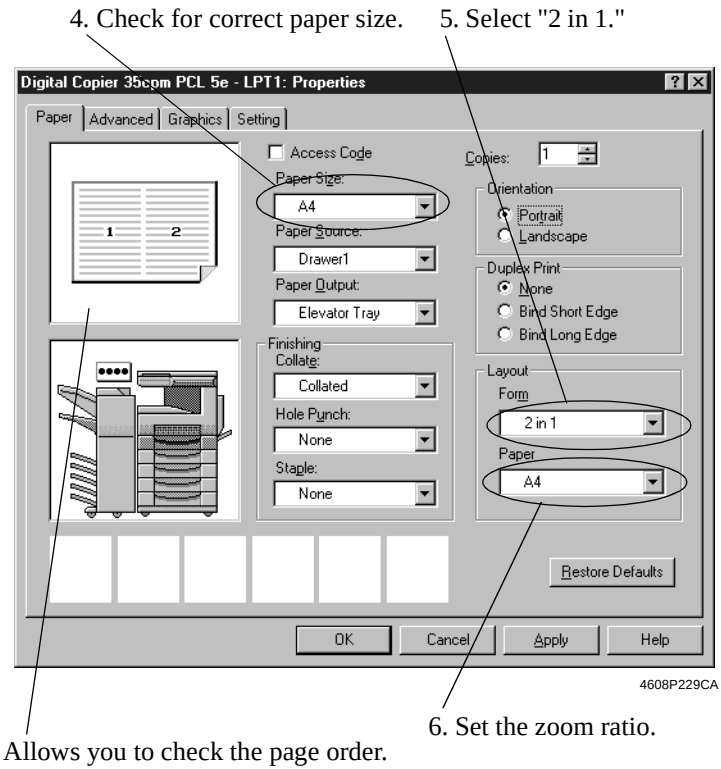
2. The Print dialog box will appear.
   Check that "Digital Copier 35cpm PCL5e" is displayed for "Name" under "Printer" and click the [Properties] button.

NOTE
Some applications allow you to set Copies and Collate (Sort) in the Print dialog box. To ensure proper printing operation, however, turn OFF these items of the application and make the necessary settings in each property sheet of the printer driver.

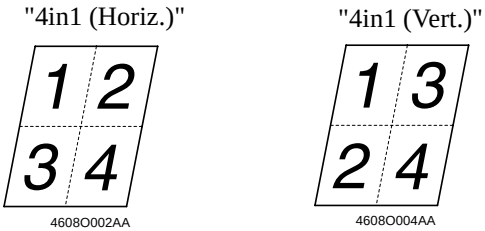
---

3. The "Digital Copier 35cpm PCL5e Properties" dialog box will appear.
   If the "Paper" property sheet is not displayed, click the "Paper" tab.

4. Check that the size of the document created with the application is displayed in "Paper Size."



5. Select "2in1" for "Form" under "Layout."
With "4in1," page order is either Horizontal Ascendant or Vertical Ascendant.



6. Select the print page size in "Paper" under "Layout."

7. Make other settings as necessary and click the [OK] button.

8. In the Print dialog box that will then reappear, click the [OK] button. Then, the data will be transferred to the machine and printing will soon start.

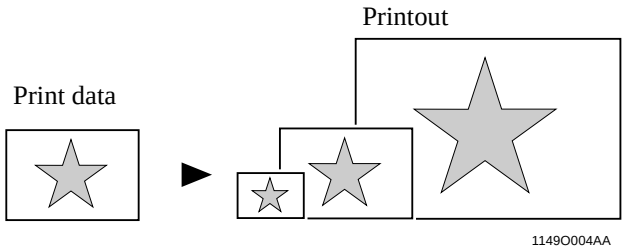
NOTES

- *If a document that contains pages of assorted sizes and directions is printed, a void image and image overlap could result.*

6. Printing in Reduced/Enlarged Size

Overview

This section explains how to reduce or enlarge the image on the document created with the application for printing.



Procedure

1. Start printing from the application which has been used to create the document. Normally, printing can be started by selecting "Print" from the "File" menu.

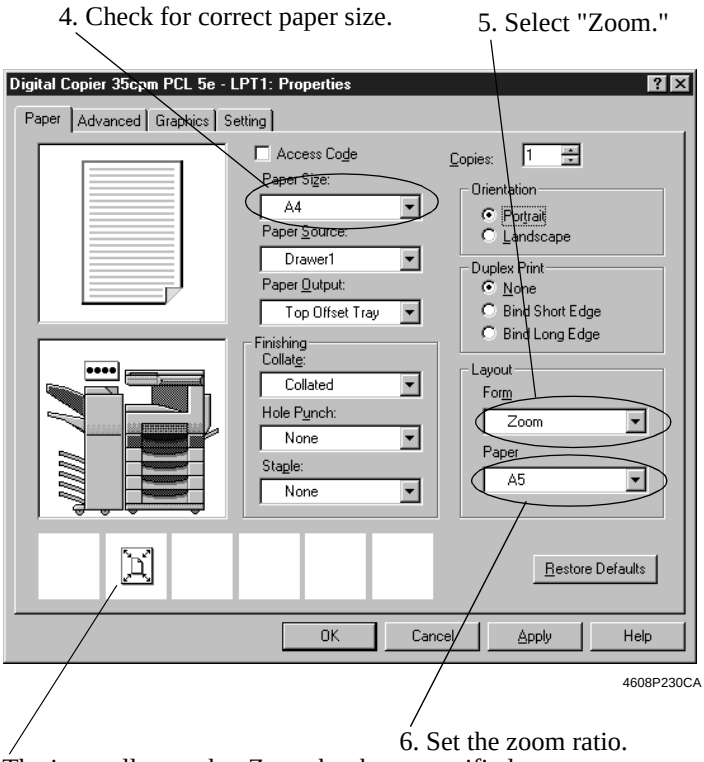
2. The Print dialog box will appear.
   Check that "Digital Copier 35cpm PCL5e" is displayed for "Name" under "Printer" and click the [Properties] button.

NOTE
Some applications allow you to set Copies and Collate (Sort) in the Print dialog box. To ensure proper printing operation, however, turn OFF these items of the application and make the necessary settings in each property sheet of the printer driver.

---

3. The "Digital Copier 35cpm PCL5e Properties" dialog box will appear.
   If the "Paper" property sheet is not displayed, click the "Paper" tab.

4. Check that the size of the document created with the application is displayed in "Paper Size."



5. Select "Zoom" for "Form" under "Layout."

6. Select the print page size in "Paper" under "Layout."

7. Make other settings as necessary and click the [OK] button.

8. In the Print dialog box that will then reappear, click the [OK] button. Then, the data will be transferred to the machine and printing will soon start.

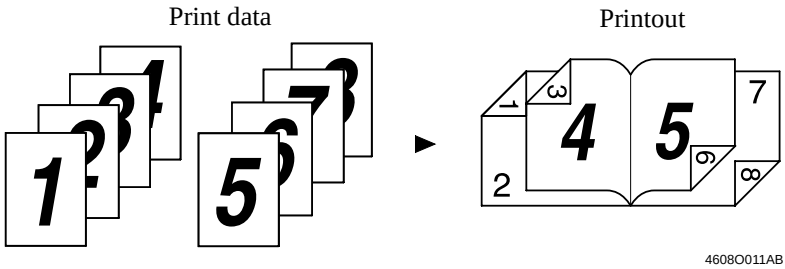
NOTE
If a paper size that does not match the paper loaded in the machine is selected, the machine will give a message that prompts you to add paper in Drawer1, entering a standby state. If Bypass has been selected, the machine will issue a message that prompts you to load paper in the manual feed port, entering a standby state.

7. Specifying Booklet Printing

Overview

This section explains how to layout and print four pages of a document to both sides of a single sheet of paper so that the printout may be folded at its center to form a booklet.

To use this function, a Duplex Unit must be mounted on the machine.



Procedure

1. Start printing from the application which has been used to create the document. Normally, printing can be started by selecting "Print" from the "File" menu.

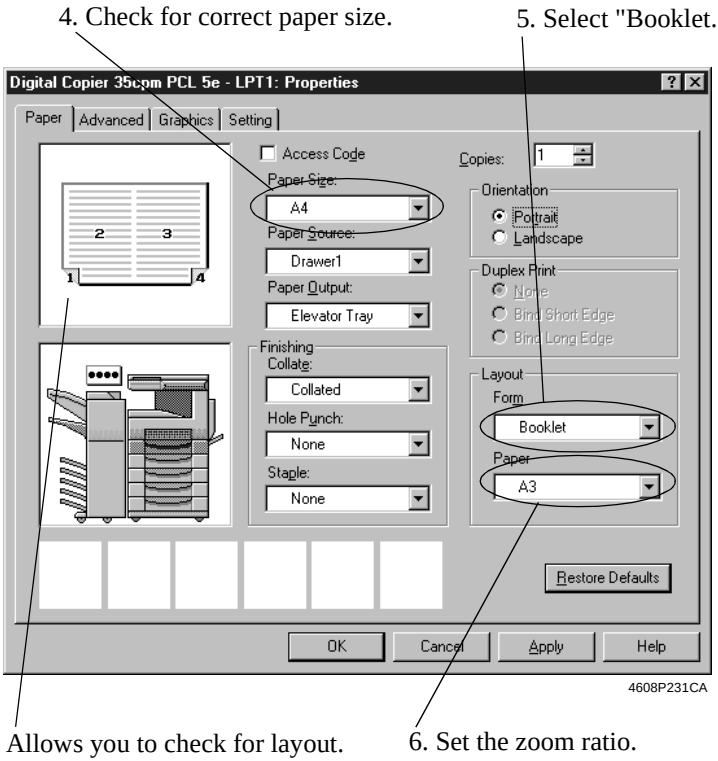
2. The Print dialog box will appear.
   Check that "Digital Copier 35cpm PCL5e" is displayed for "Name" under "Printer" and click the [Properties] button.

NOTE
Some applications allow you to set Copies and Collate (Sort) in the Print dialog box. To ensure proper printing operation, however, turn OFF these items of the application and make the necessary settings in each property sheet of the printer driver.

---

3. The "Digital Copier 35cpm PCL5e Properties" dialog box will appear.
   If the "Paper" property sheet is not displayed, click the "Paper" tab.

4. Check that the size of the document created with the application is displayed in "Paper Size."



5. Select "Booklet" for "Form" under "Layout."
6. Select the print page size in "Paper" under "Layout."
7. Make other settings as necessary and click the [OK] button.
8. In the Print dialog box that will then reappear, click the [OK] button. Then, the data will be transferred to the machine and printing will soon start.

NOTE
If the original document for a print job contains a page with a different size or different direction from the others and this document is printed, a void image or overlapped image could result.

8. Using the Copy Track Function

Overview

It is possible to keep track of the number of prints produced by each account.
The particular setting made in the machine determines the number of accounts to be controlled, either 100 or 1,000.

Procedure

The timing at which the Security dialog box appears varies with different OS. The procedure is given for each OS.
Those for Windows 3.1 and NT 3.51 are contained in the PCL5e version.

Procedure Applicable to Windows 95

1. Start printing from the application which has been used to create the document. Normally, printing can be started by selecting "Print" from the "File" menu.

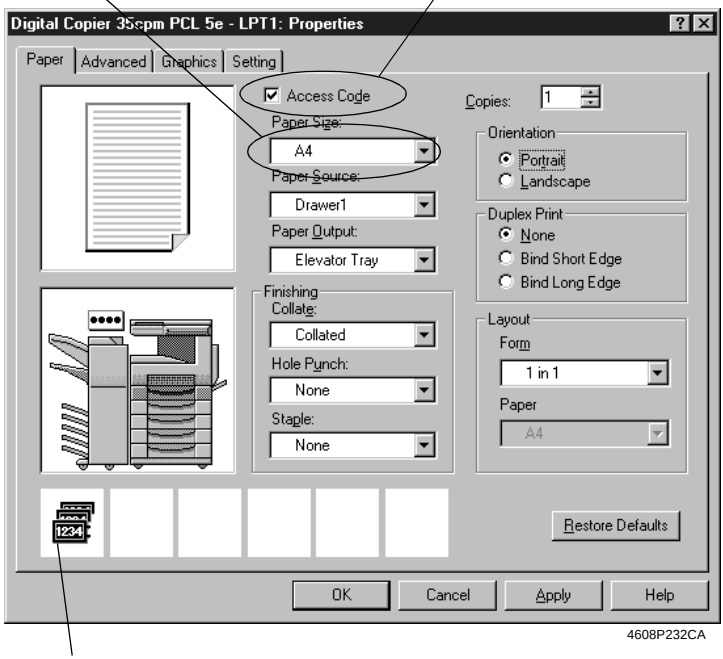
2. The Print dialog box will appear.
   Check that "Digital Copier 35cpm PCL5e" is displayed for "Name" under "Printer" and click the [Properties] button.

NOTE
Some applications allow you to set Copies and Collate (Sort) in the Print dialog box. To ensure proper printing operation, however, turn OFF these items of the application and make the necessary settings in each property sheet of the printer driver.

---

3. The "Digital Copier 35cpm PCL5e Properties" dialog box will appear.
   If the "Paper" property sheet is not displayed, click the "Paper" tab.

4. Check that the size of the document created with the application is displayed in "Paper Size."



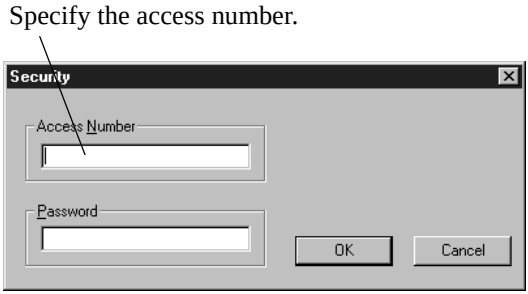
The icon tells that Access Code has been selected.

5. Select "Access Code."

6. Make other settings as necessary and click the [OK] button.

7. The Print dialog box will reappear. Click the [OK] button.

8. The "Access Number" dialog box will appear. Type your access number and click the [OK] button.



9. The data will then be transferred to the machine and printing will soon start.

NOTES

- *When the [Cancel] button is clicked on the Security dialog box, the data is transmitted with Access Code and Lock Job not specified. It does not mean the cancellation of data transmission.*
- *When Access Code is used, printing may not be effected unless the access number has been correctly set. It is possible, by using the utility that comes with the NIC Board (option), to check on the personal computer screen to see whether the job has been canceled or not.*

Procedure Applicable to Windows NT 4.0

1. Start printing from the application that has been used to create the document. Normally, selecting "Print" from the "File" menu can start printing.

2. The Print dialog box will appear.
   Check that "Digital Copier 35cpm PCL 5e" is displayed for "Name" under "Printer" and click the [Properties] button.

NOTE
Some applications allow you to set Copies and Collate (Sort) in the Print dialog box. To ensure proper printing operation, however, turn OFF these items of the application and make the necessary settings in each property sheet of the printer driver.

---

3. The "Digital Copier 35cpm PCL 5e Properties" dialog box will appear. If the "Paper" property sheet is not displayed, click the "Paper" tab.

4. Check that the size of the document created with the application is displayed in "Paper Size."

5. Select "Access Code."
   The Security dialog box will appear.

6. Type your access number and click the [OK] button.

7. Make other settings as necessary and click the [OK] button.

8. The Print dialog box will reappear. Click the [OK] button. Then, the data will be transferred to the machine and printing will soon start.

Procedure Applicable to Windows 3.1

1. Set up printing on the application that has been used to create the document. Normally, select "Print Setup..." from the "File" menu to set up for printing.

2. The Print Setup dialog box will appear.
   Check that "Digital Copier 35cpm PCL5e" is displayed for "Printer" and then click the [Options...] button.

NOTE
Some applications allow you to set Copies and Collate (Sort) in the Print dialog box. To ensure proper printing operation, however, turn OFF these items of the application and make the necessary settings in each property sheet of the printer driver.

---

3. The "Digital Copier 35cpm PCL5e Properties" dialog box will appear.

4. Check that the size of the document created with the application is displayed in "Paper Size."

5. Select "Access Code."

6. Make other settings as necessary and click the [OK] button.

7. The Print Setup dialog box will reappear. Click the [OK] button to go back to the application.

8. Run the print cycle from the application with which the document has been created. To run a print cycle, select [Print] from the [File] menu.

9. The Security dialog box appears. Type your access number and click the [OK] button.

10. Then, the data will be transferred to the machine and printing will soon start.

NOTE
When the [Cancel] button is clicked on the Security dialog box, the data is transmitted with Access Code and Lock Job not specified. It does not mean the cancellation of data transmission.

Procedure Applicable to Windows NT 3.51

1. Start printing from the application that has been used to create the document. Normally, selecting "Print Setup..." from the "File" menu can start printing.

2. The Print Setup dialog box will appear.
   Check that "Digital Copier 35cpm PCL 5e" is displayed for "Name" under "Printer" and click the [Properties] button.

NOTE
Some applications allow you to set Copies and Collate (Sort) in the Print dialog box. To ensure proper printing operation, however, turn OFF these items of the application and make the necessary settings in each property sheet of the printer driver.

---

3. The "Digital Copier 35cpm PCL 5e Properties" dialog box will appear.

4. Check that the size of the document created with the application is displayed in "Paper Size."

5. Select "Access Code."
   The Security dialog box will appear.

6. Type your access number and click the [OK] button.

7. Make other settings as necessary and click the [OK] button.

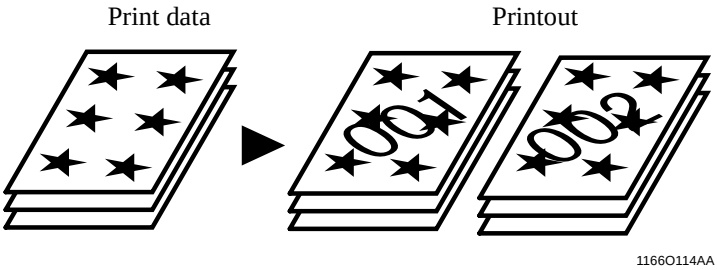
8. The Print Setup dialog box will reappear. Click the [OK] button to go back to the application.

9. Select "Print" from the "File" menu of the application. Then, the data will be transferred to the machine and printing will soon start.

9. Printing Pages with a Distribution Number

Overview

This section explains how to print a distribution number in the background for each copy set.



NOTE
The orientation of the distribution number may not match that of the print image.

Procedure

1. Start printing from the application which has been used to create the document. Normally, printing can be started by selecting "Print" from the "File" menu.

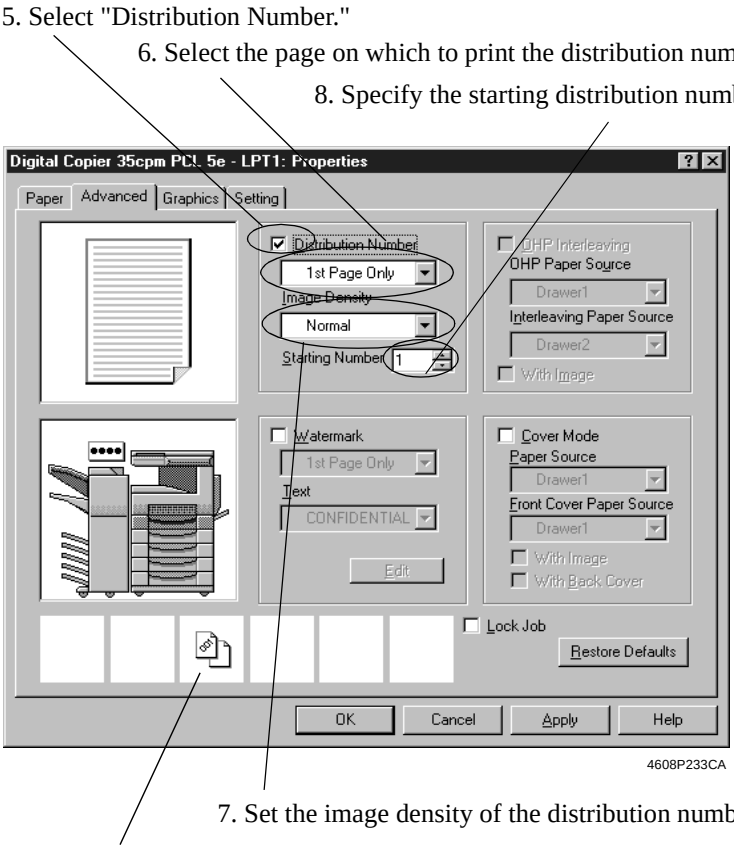
2. The Print dialog box will appear.
   Check that "Digital Copier 35cpm PCL5e" is displayed for "Name" under "Printer" and click the [Properties] button.

NOTE
Some applications allow you to set Copies and Collate (Sort) in the Print dialog box. To ensure proper printing operation, however, turn OFF these items of the application and make the necessary settings in each property sheet of the printer driver.

3. The "Digital Copier 35cpm PCL5e Properties" dialog box will appear.

4. On the "Paper" property sheet, check that "Paper Size" and other items are set properly.

5. Click the "Advanced" tab and select "Distribution Number."



6. Select the page on which to print the distribution number, either 1st Page Only or All Pages.

7. Set the image density of the distribution number for "Image Density."

8. Specify the starting distribution number for "Starting Number."

9. Make other settings as necessary and click the [OK] button.

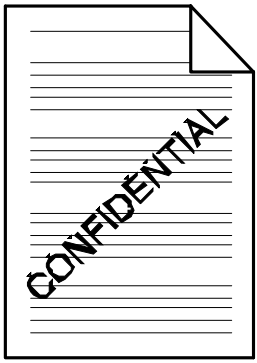
10. In the Print dialog box that will then reappear, click the [OK] button. Then, the data will be transferred to the machine and printing will soon start.

10. Printing Pages with Watermarks

Overview

This section explains how to print pages with text (e.g. Confidential, Draft) in the background.

Watermark Print



Procedure

1. Start printing from the application which has been used to create the document. Normally, printing can be started by selecting "Print" from the "File" menu.

2. The Print dialog box will appear.
   Check that "Digital Copier 35cpm PCL5e" is displayed for "Name" under "Printer" and click the [Properties] button.

NOTE
Some applications allow you to set Copies and Collate (Sort) in the Print dialog box. To ensure proper printing operation, however, turn OFF these items of the application and make the necessary settings in each property sheet of the printer driver.

---

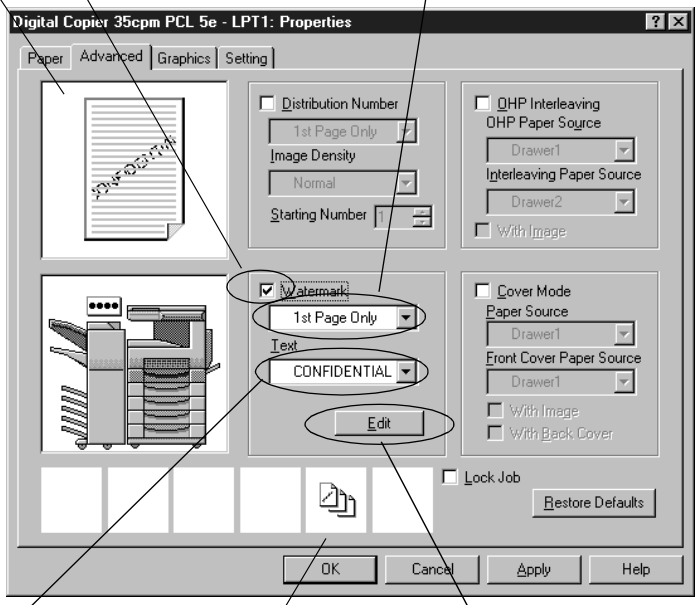
3. The "Digital Copier 35cpm PCL5e Properties" dialog box will appear.

4. On the "Paper" property sheet, check that "Paper Size" and other items are set properly.

5. Click the "Advanced" tab and select "Water Mark."

Allows you to view a print sample.

5. Select "Watermark." 6. Select the page on which to print the watermark



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7. Select the desired watermark.

8. Specify the editing function for the watermark

The icon tells that Watermark has been enabled.

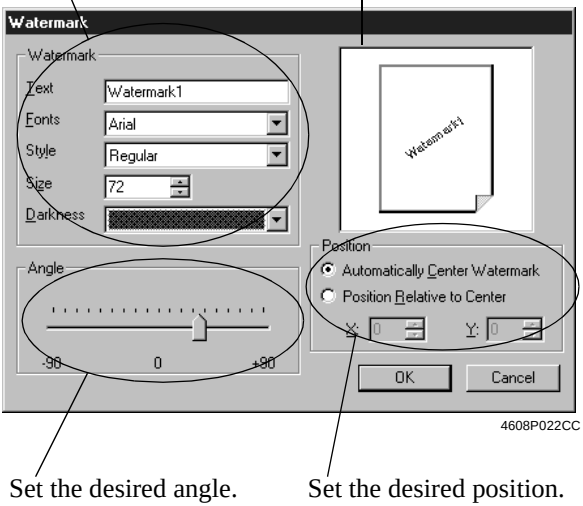
6. Select the page on which to print the watermark, either 1st Page Only or All Pages.

7. Select the desired watermark.

8. If you do not find an appropriate watermark among those available or if you want to change the position or style of an existing watermark, click the [Edit] button, which opens the "Watermark" dialog box.
   Specify "Text" and text style, "Angle," and "Position."

TIP

For the position, specify the distance from the center. The + direction in X is toward the right and the + direction in Y is upward.



9. After the settings have been made, click the [OK] button to close the dialog box.

10. Make other settings as necessary and click the [OK] button.

11. In the Print dialog box that will then reappear, click the [OK] button. Then, the data will be transferred to the machine and printing will soon start.

NOTE

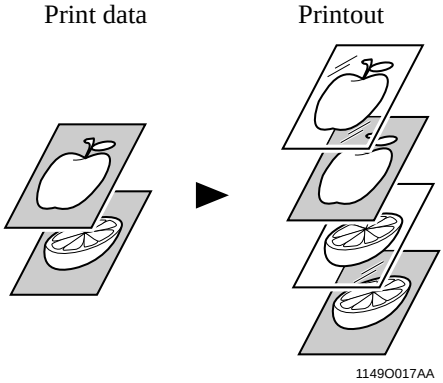
This function may not be effective in some applications.

---

11. Printing on OHP Transparencies

Overview

This section explains how to insert a sheet of paper (interleaf) between sheets of OHP transparencies when printing on sheets of OHP transparencies. This interleaf may be left blank or have the same data printed on it as the OHP transparencies.



Procedure

1. Start printing from the application which has been used to create the document. Normally, printing can be started by selecting "Print" from the "File" menu.

2. The Print dialog box will appear.
   Check that "Digital Copier 35cpm PCL5e" is displayed for "Name" under "Printer" and click the [Properties] button.

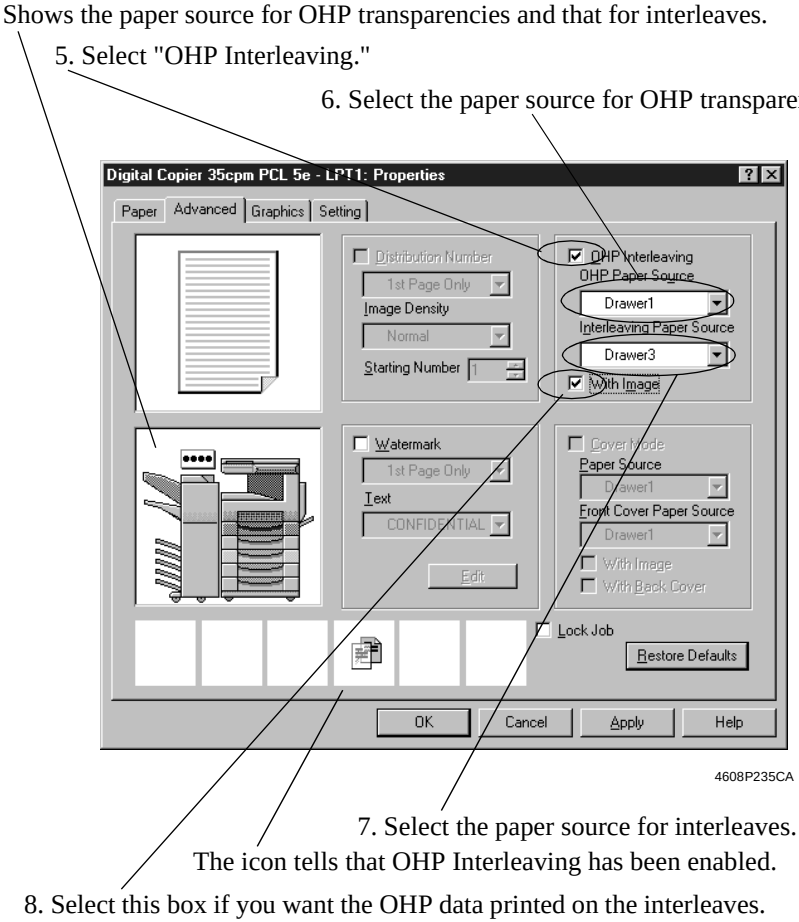
NOTE
Some applications allow you to set Copies and Collate (Sort) in the Print dialog box. To ensure proper printing operation, however, turn OFF these items of the application and make the necessary settings in each property sheet of the printer driver.

---

3. The "Digital Copier 35cpm PCL5e Properties" dialog box will appear.

4. On the "Paper" property sheet, check that "Paper Size" and other items are set properly.

5. Click the "Advanced" tab and select "OHP Interleaving."



6. Select the paper source for OHP transparencies under "OHP Paper Source."

7. Select the paper source for interleaves under "Interleaving Paper Source."

8. Select the "with Image" box if you want the OHP data printed on the interleaves.

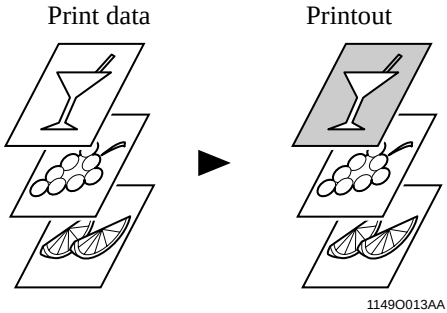
9. Make other settings as necessary and click the [OK] button.

10. In the Print dialog box that will then reappear, click the [OK] button. Then, the data will be transferred to the machine and printing will soon start.

12. Adding a Cover to Each Copy Set

Overview

This section explains how to add a front cover and/or a back cover to each of your copy sets. Four different modes are available to choose from. Select the appropriate one according to your needs.



Procedure

1. Start printing from the application which has been used to create the document. Normally, printing can be started by selecting "Print" from the "File" menu.

2. The Print dialog box will appear.
   Check that "Digital Copier 35cpm PCL5e" is displayed for "Name" under "Printer" and click the [Properties] button.

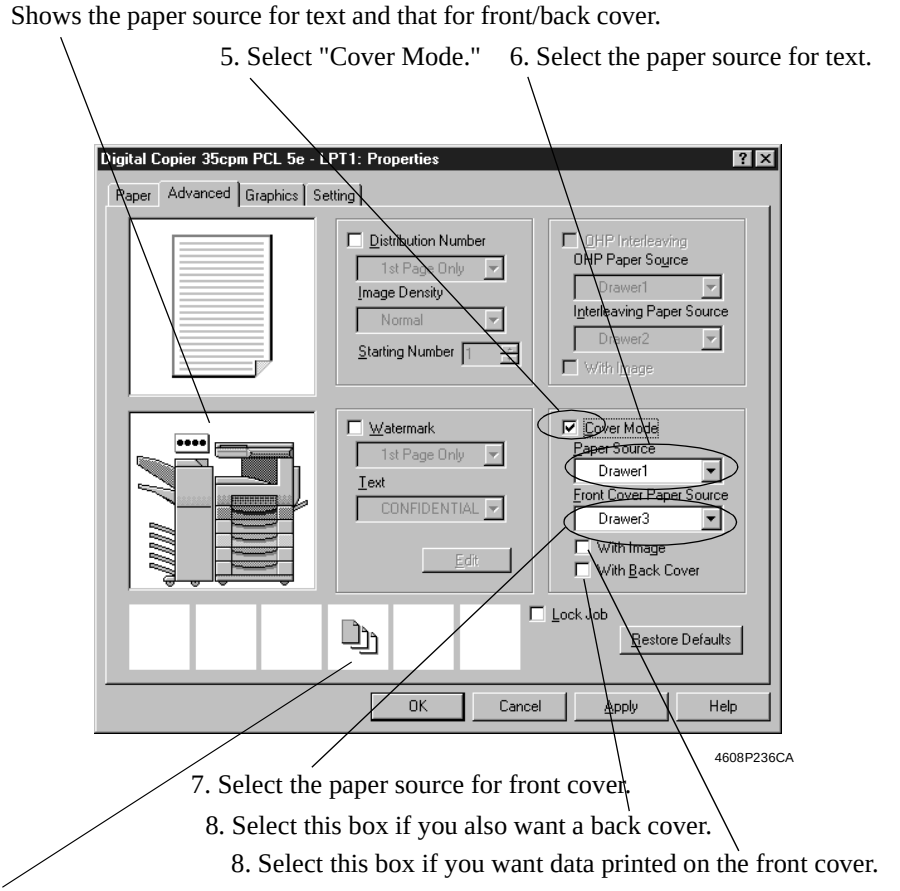
NOTE
Some applications allow you to set Copies and Collate (Sort) in the Print dialog box. To ensure proper printing operation, however, turn OFF these items of the application and make the necessary settings in each property sheet of the printer driver.

---

3. The "Digital Copier 35cpm PCL5e Properties" dialog box will appear.

4. On the "Paper" property sheet, check that "Paper Size" and other items are set properly.

5. Click the "Advanced" tab and select "Cover Mode."

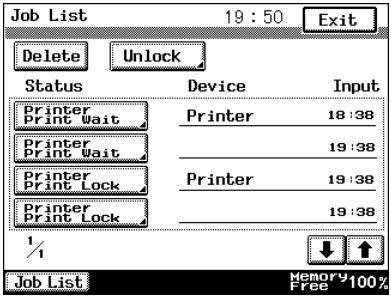


6. Select the paper source for text under "Paper Source."
7. Select the paper source for the front/back cover under "Front Cover Paper Source."
8. Select the "with Image" and/or "with Back Cover" boxes if you want data printed on the front cover and if you want also a back cover.
9. Make other settings as necessary and click the [OK] button.
10. In the Print dialog box that will then reappear, click the [OK] button. Then, the data will be transferred to the machine and printing will soon start.

13. Using the Lock Job Function

Overview

Lock Job allows you to keep a particular document confidential and that document can be printed only when a password is entered on the machine.



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Procedure on the Printer Drive Side

The timing at which the Security dialog box appears varies with different OS. The procedure is given for each OS.
Those for Windows 3.1 and NT 3.51 are contained in the PCL5e version.

NOTE
Slightly different procedures are used to access each screen among PCL5e, PCL6, and PS.

Procedure Applicable to Windows 95

1. Start printing from the application which has been used to create the document. Normally, printing can be started by selecting "Print" from the "File" menu.

2. The Print dialog box will appear.
   Check that "Digital Copier 35cpm PCL5e" is displayed for "Name" under "Printer" and click the [Properties] button.

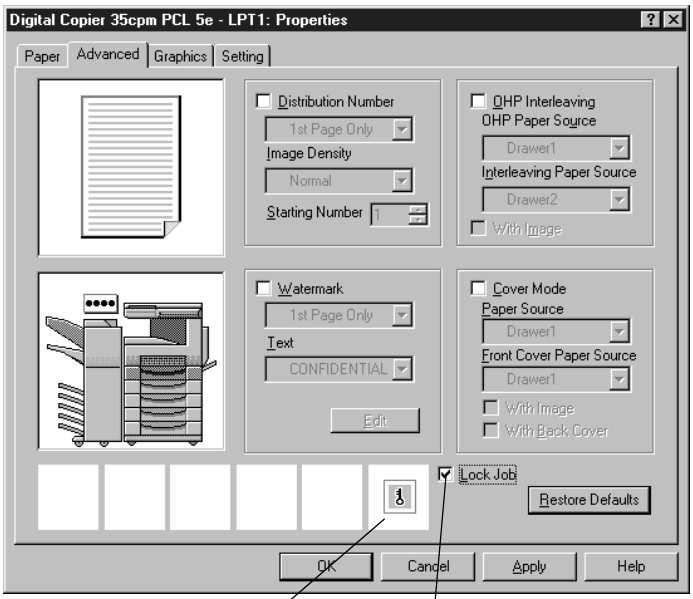
NOTE
Some applications allow you to set Copies and Collate (Sort) in the Print dialog box. To ensure proper printing operation, however, turn OFF these items of the application and make the necessary settings in each property sheet of the printer driver.

---

3. The "Digital Copier 35cpm PCL5e Properties" dialog box will appear.

4. On the "Paper" property sheet, check that "Paper Size" and other items are set properly.

5. Click the "Advanced" tab and select "Lock Job."



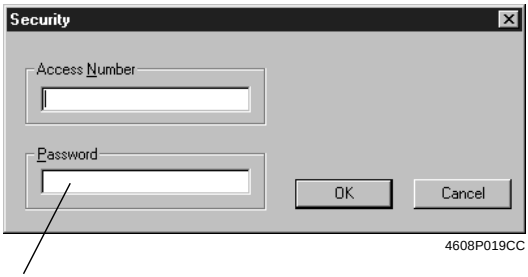
6. Select "Lock Job."

The icon tells that Lock Job has been enabled.

6. Make other settings as necessary and click the [OK] button.

7. The Print dialog box will appear. Click the [OK] button.

8. The "Access Number" dialog box will appear. Type your password and click the [OK] button.



Specify the password.

9. The data will then be transferred to the machine. Printing will not, however, start at this point yet.

NOTE
When the [Cancel] button is clicked in the Windows 95/3.1 version driver, it means that the data is transmitted with Access Code and Lock Job not specified. It does not mean the cancellation of data transmission.

Procedure Applicable to Windows NT 4.0

1. Start printing from the application that has been used to create the document. Normally, selecting "Print" from the "File" menu can start printing.

2. The Print dialog box will appear.
   Check that "Digital Copier 35cpm PCL 5e" is displayed for "Name" under "Printer" and click the [Properties] button.

NOTE
Some applications allow you to set Copies and Collate (Sort) in the Print dialog box. To ensure proper printing operation, however, turn OFF these items of the application and make the necessary settings in each property sheet of the printer driver.

---

3. The "Digital Copier 35cpm PCL 5e Properties" dialog box will appear. If the "Paper" property sheet is not displayed, click the "Paper" tab.

4. Check that the "Paper Size" and other items are properly set on the "Paper" property sheet.

5. Click the "Advanced" tab and select "Lock Job."
   The Security dialog box will appear.

6. Type your password and click the [OK] button.

7. Make other settings as necessary and click the [OK] button.

8. The Print dialog box will reappear. Click the [OK] button. Then, the data will be transferred to the machine.
   Printing will not, however, start at this point yet.

Procedure Applicable to Windows 3.1

1. Set up printing on the application that has been used to create the document. Normally, select "Print Setup..." from the "File" menu to set up for printing.
2. The Print Setup dialog box will appear.
   Check that "Digital Copier 35cpm PCL5e" is displayed for "Name" under "Printer" and click the [Options...] button.

NOTE
Some applications allow you to set Copies and Collate (Sort) in the Print dialog box. To ensure proper printing operation, however, turn OFF these items of the application and make the necessary settings in each property sheet of the printer driver.

---

3. The "Digital Copier 35cpm PCL5e Properties" dialog box will appear.
4. Check that the size of the document created with the application is displayed in "Paper Size."
5. Click the [Advanced] button and select "Lock Job."
6. Click the [OK] button to go back to the Paper property sheet.
7. Make other settings as necessary and click the [OK] button.
8. The Print Setup dialog box will reappear. Click the [OK] button to go back to the application.
9. Run the print cycle from the application with which the document has been created. To run a print cycle, select [Print] from the [File] menu.
10. The Security dialog box appears. Type your password and click the [OK] button.
11. Then, the data is transferred to the machine. At this time, however, printing does not immediately start.

NOTE
When the [Cancel] button is clicked on the Security dialog box, the data is transmitted with Access Code and Lock Job not specified. It does not mean the cancellation of data transmission.

Procedure Applicable to Windows NT 3.51

1. Start printing from the application that has been used to create the document. Normally, selecting "Print Setup..." from the "File" menu can start printing.

2. The Print Setup dialog box will appear.
   Check that "Digital Copier 35cpm PCL 5e" is displayed for "Name" under "Printer" and click the [Properties] button.

NOTE
Some applications allow you to set Copies and Collate (Sort) in the Print dialog box. To ensure proper printing operation, however, turn OFF these items of the application and make the necessary settings in each property sheet of the printer driver.

---

3. The "Digital Copier 35cpm PCL 5e Properties" dialog box will appear.

4. Check that the size of the document created with the application is displayed in "Paper Size."

5. Click the "Advanced" tab and select "Lock Job."
   The Security dialog box will appear.

6. Type your password and click the [OK] button.

7. Click the [OK] button to go back to the Paper property sheet.

8. Make other settings as necessary and click the [OK] button.

9. The Print Setup dialog box will reappear. Click the [OK] button to go back to the application.

10. Select “Print” from the “File” menu of the application. This shows the Print dialog box. Now, click the [OK] button. Then, the data will be transferred to the machine.

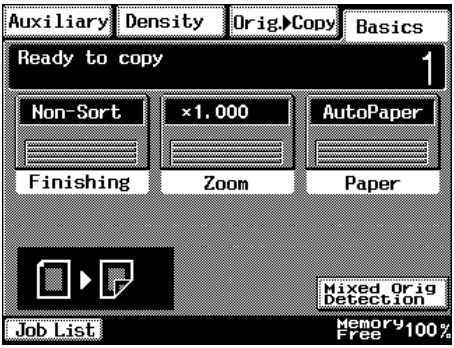
11. The Print dialog box will appear. Clicking the [OK] button causes the data to be transferred to the machine.
    Printing will not, however, start at this point yet.

Procedure on the Machine Side

Unlocking a Job

After the data has been transferred to the machine, operate the machine to start printing.

1. Touch the [Job List] key.



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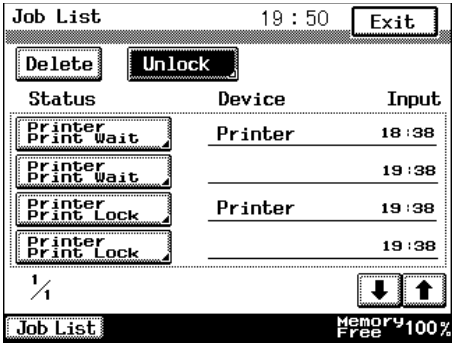
2. Touch the [Unlock] key.



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3. Enter the password.

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4. Printing will start.

TIPS

- *If there is a job that has previously been stored as a locked job, that job is first printed.*
- *There is no need of selecting a job or jobs to be unlocked. All locked jobs having the same password are unlocked.*

Deleting a Job

After the data has been transferred to the machine, it is deleted without being printed.

1. Touch the [Job List] key.

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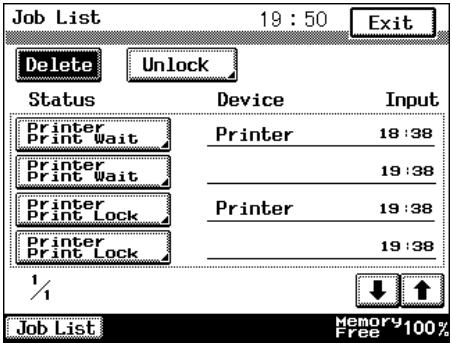
2. Touch the [Delete] key.



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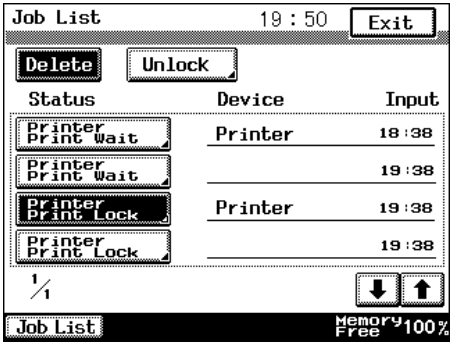
3. Select the job to be deleted.



4608P188CA

4. Touch the [Exit] key.

TIP

To cancel the deletion, touch the [No] key, then [Exit] key.

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5. This deletes the job from the job list.

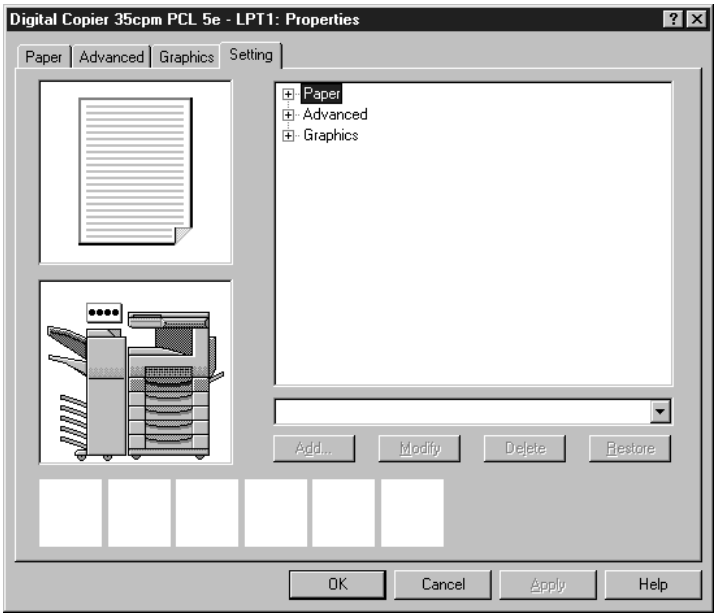
TIPS

- *If there is a job that has previously been stored as a locked job, that job is first printed.*
- *No password is necessary to delete a job.*

14. Using the Settings Function

Overview

Frequently used groupings of print settings can be stored and called up as necessary for application in actual print jobs.



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Procedure

Settings may be stored, called up, deleted, and modified.
Storing, deleting, and modifying the setting data can be made from the printer icon property opened from the Printers window. The following steps are, however, concerned with the procedures when the property is opened from the application.

Using the Settings Stored for a Current Print Job

1. Start printing from the application which has been used to create the document. Normally, printing can be started by selecting "Print" from the "File" menu.

2. The Print dialog box will appear.
   Check that "Digital Copier 35cpm PCL5e" is displayed for "Name" under "Printer" and click the [Properties] button.

NOTE
Some applications allow you to set Copies and Collate (Sort) in the Print dialog box. To ensure proper printing operation, however, turn OFF these items of the application and make the necessary settings in each property sheet of the printer driver.

---

3. The "Digital Copier 35cpm PCL5e Properties" dialog box will appear.

4. Click the "Settings" tab.

5. Click the down-arrow "▼" of Title and, from the menu that will appear, select the title name to be used.

6. Click the [Restore] button.
   The printer controller then reads the setting data. The details of the setting data read can be checked on each property sheet or the Setting screen.

NOTE
The options that have a different status from that of the Device Option of the currently used driver are marked with ⦸ and they cannot be restored.

---

7. Click the [OK] button.

8. In the Print dialog box that will then reappear, click the [OK] button. Then, the data will be transferred to the machine and printing will soon start.

Storing Settings

1. Start printing from the application which has been used to create the document. Normally, printing can be started by selecting "Print" from the "File" menu.

2. The Print dialog box will appear.
   Check that "Digital Copier 35cpm PCL5e" is displayed for "Name" under "Printer" and click the [Properties] button.

NOTE
Some applications allow you to set Copies and Collate (Sort) in the Print dialog box. To ensure proper printing operation, however, turn OFF these items of the application and make the necessary settings in each property sheet of the printer driver.

---

3. The "Digital Copier 35cpm PCL5e Properties" dialog box will appear.

4. Make settings in the "Paper," "Advanced," and "Graphics" properties as necessary.

5. Type the title name to be stored in the Title box and click the [Add...] button.

6. Click the [OK] button.

7. The Print dialog box will then reappear. To start printing immediately, click the [OK] button. Then, the data will be transferred to the machine and printing will soon start. If printing is not done for now, click the [Cancel] button.

NOTE
Settings can be stored from the printer icon property sheet opened from the Printers window. The same procedure also applies when the printer icon property sheet is used; however, be sure to click the [Cancel] button to close the property sheet. If it is closed by clicking the [OK] button, the settings will be the default values when the property sheet is accessed from the application.

Deleting Settings Which Have Been Stored

1. Start printing from the application which has been used to create the document. Normally, printing can be started by selecting "Print" from the "File" menu.

2. The Print dialog box will appear.
   Check that "Digital Copier 35cpm PCL5e" is displayed for "Name" under "Printer" and click the [Properties] button.

NOTE
Some applications allow you to set Copies and Collate (Sort) in the Print dialog box. To ensure proper printing operation, however, turn OFF these items of the application and make the necessary settings in each property sheet of the printer driver.

---

3. The "Digital Copier 35cpm PCL5e Properties" dialog box will appear.

4. Click the "Settings" tab.

5. Click the down arrow "▼" of Title and, from the menu that will appear, select the title name to be used.

6. Click the [Delete] button.
   This deletes the specified title name.

NOTE
The options that have a different status from that of the Device Option of the currently used driver are marked with ⃠, but they can be deleted after selection.

---

7. Click the [OK] button.

8. In the Print dialog box that will then reappear, click the [Cancel] button.

NOTE
Settings can be deleted from the printer icon property sheet opened from the Printers window.

Modifying Settings Which Have Been Stored

1. Start printing from the application which has been used to create the document. Normally, printing can be started by selecting "Print" from the "File" menu.

2. The Print dialog box will appear.
   Check that "Digital Copier 35cpm PCL5e" is displayed for "Name" under "Printer" and click the [Properties] button.

NOTE
Some applications allow you to set Copies and Collate (Sort) in the Print dialog box. To ensure proper printing operation, however, turn OFF these items of the application and make the necessary settings in each property sheet of the printer driver.

---

3. The "Digital Copier 35cpm PCL5e Properties" dialog box will appear.

4. Make settings in the "Paper," "Advanced," and "Graphics" properties as necessary.

5. Click the down arrow "▼" of Title and, from the menu that will appear, select the title name to be modified.

6. Click the [Modify] button. The setting data is rewritten.

7. Click the [OK] button.

8. The Print dialog box will then reappear. To start printing immediately, click the [OK] button. Then, the data will be transferred to the machine and printing will soon start. If printing is not done for now, click the [Cancel] button.

NOTE
Settings can be modified from the printer icon property sheet opened from the Printers window.

Chapter 5

Troubleshooting

1. Troubleshooting

Unable to Print

This chapter explains about the troubleshooting procedures for possible malfunctions. Perform the troubleshooting procedures given below in that order when the machine is unable to print even if you execute a print command from your computer.

Symptom	Possible Cause	Action
A message appears on the computer screen, saying to the effect that "no printer is connected," "no paper is loaded," or "LPT1 write error."	An error is present in the machine.	Check the control panel of the machine. If an error is displayed, identify the error and take the necessary action by referring to "Error List" on p. 5-9.
	The interface cable that connects the printer controller to the machine is disconnected.	Check that the printer controller connection cable is plugged into the machine.
	The printer cable or network cable is disconnected.	Check that the printer cable or network cable is connected properly to the computer and printer controller.
Printing does not start despite the completion of printing setup on the computer.	An error is present in the machine.	Check the control panel of the machine. If an error is displayed, identify the error and take the necessary action by referring to "Error List" on p. 5-9.
	The interface cable that connects the printer controller to the machine is disconnected.	Check that the printer controller connection cable is plugged into the machine.
	The printer cable or network cable is disconnected.	Check that the printer cable or network cable is connected properly to the computer and printer controller.
	The printer driver selected for printing is not for the Digital Copier 35cpm.	Check the printer name selected in the "Print" dialog box.
	A print job yet to be processed is loaded in the machine, causing the printer to wait.	Refer to the Job List on the machine control panel to check for print order.

Symptom	Possible Cause	Action
Continued from the previous page (Printing does not start despite the completion of printing setup on the computer.)	The print job is locked.	Refer to the Job List on the machine control panel to see if the print job in question is locked. If so, unlock it.
	The connection of the printer controller to the network has not been established.	Consult the network administrator.
	The print job was canceled.	Check the control panel of the machine. If an error is displayed, identify the error and take the necessary action by referring to "Error List" on p. 5-9.
	Machine memory space available is not sufficient.	Add the machine memory to expand its space.
	If the copy track function is enabled, an illegal access number might have been entered.	Enter the correct access number.
Multiple copy sets are mistakenly sorted and stapled together as a single large set.	The settings in certain DTP software applications may conflict with the printer driver settings.	In the application, turn OFF Collate and set the copy count to one. In the printer driver, make the desired Collate and copy count settings.
A large number of copies are mistakenly printed.	The settings in certain DTP software applications may conflict with the printer driver settings.	In the application, turn OFF Collate and set the copy count to one. In the printer driver, make the desired Collate and copy count settings.
A document containing more than 40 pages cannot be printed.	The maximum number of document pages that can be stored in the standard memory is 40.	• Decrease the number of document pages or add memory to expand its capacity. • Select "Printer" for "Priority Device" available in 1/5 of User's Choice on the machine.

Symptom	Possible Cause	Action
A PS error print is output.	Some applications allow you to select either "Binary" or "ASCII" mode when the PS driver is being used. A PS error could result if an attempt is made to print in the "Binary" mode.	Select the "ASCII" mode.

If the problem persists even after these checks have been made, refer to the documentation provided for the machine.

Unable to Make Correct Settings / Unable to Print Exactly as Set

Perform the troubleshooting procedures given below in that order when you cannot make proper settings in the printer driver or when the print results do not represent what has been set.

Symptom	Possible Cause	Action
Unable to select an item in the printer driver.	Some functions cannot be combined.	Do not select items which are dimmed or marked with ⊘.
The "Conflict Setting Validation" dialog box is displayed on the computer screen.	An illegal combination of functions has been made.	Check for combination and make a correct combination of functions.
Unable to print exactly as set.	Incorrect settings are made.	Check the setting for each item of the printer driver.
The watermark cannot be printed.	The watermark is not correctly set.	Check the watermark setting.
	The "Darkness" setting of the watermark is low.	Check the "Darkness" setting of the watermark.
Unable to specify Staple.	Staple can be specified only when "Finisher" or "Mailbin Finisher" is selected for "Finisher" on the "Device Option" property sheet and "Elevator Tray" is selected for "Paper Output" on the "Paper" property sheet.	Select "Finisher" or "Mailbin Finisher" for "Finisher" on the "Device Option" property sheet, and select "Elevator Tray" for "Paper Output" on the "Paper" property sheet.
	No stapling can be effected if the paper size is any but Ledger, Legal, Letter, A4, and A3, the paper source is the manual feed port, any exit port is selected but the Elevator Tray, Booklet is specified, OHP Interleaving is specified, or UnCollated is specified.	Check the setting of the paper size, paper source, exit port, Booklet, OHP Interleaving, and Collated.

Symptom	Possible Cause	Action
Unable to staple properly.	No stapling can be effected if the type of paper is thick paper or OHP transparencies.	Check the type of paper.
	No stapling can be effected if the number of prints to be made exceeds 50 or the original document contains pages of different sizes.	Check the number of prints to be made.
Unable to specify Hole Punch.	Either a Finisher or Mailbin Finisher must be mounted to enable setting Hole Punch. Hole Punch can be specified only if Finisher or Mailbin Finisher is selected in Device Option.	Select Finisher or Mailbin Finisher in Device Option.
	Hole Punch cannot be specified if Booklet or OHP Interleaving is specified.	Check the setting of Booklet and OHP Interleaving.
Unable to effect Hole Punch.	No holes can be made if the type of paper is thick paper or OHP transparencies.	Check the type of paper.
	Prints can at times be fed out without being punched if the direction of the paper loaded in the paper source is not appropriate.	Check the direction of the paper.
Unable to print image properly.	Machine memory space available is not sufficient.	Add the machine memory to expand its space or simplify the image to reduce the amount of data handled.
Unable to specify the exit port	No exit port can be specified if the paper size is A6 or B6, or OHP Interleaving is specified.	Check the setting of the paper size and OHP Interleaving.

Symptom	Possible Cause	Action
Unable to properly feed prints out to the specified port.	No prints are fed into the Elevator Tray or Mailbin1 to 5 if the paper type is thick paper or OHP transparencies, or the paper size is A5 or smaller.	Check the paper type and paper size.
Paper is not fed from the specified paper source.	Paper is not be fed from the specified paper source if that paper source is loaded with paper of a different size and direction.	Load the paper source with paper of the appropriate size and in the appropriate direction.
Watermark is not printed.	Watermark may not be printed in graphics applications.	No watermark can be printed in this case.
Unable to print exactly as set.	The paper size, paper direction, and other settings made on the application takes precedence over those made in the driver.	Make correct settings on the application.

Poor Print Quality

Perform these troubleshooting procedures when you get poor print quality.

Symptom	Possible Cause	Action
Shades of gray are not clear.	Halftone setting is improperly set.	Check the setting made in "Halftone" in the "Graphics" property sheet.

If the problem persists even after these checks have been made, refer to the documentation provided for the machine.

Error List

When an error occurs, the machine control panel gives the message of "Printer controller failure -> 18xx."
The table below lists the meanings of different error codes, together with the appropriate remedial procedures. Should an error occur, identify the detail of the error and take the necessary action.

Code	Description	Action
1810	Parallel interface being initialized.	Turn OFF the power, then turn it ON again. If the error persists, consult your Tech. Rep.
1811	NIC interface being initialized.	
1812	DL controller internal logic circuitry being initialized.	
1813	Printer functions being started.	
1820	NVRAM error Issued when a fault is found in the condition of the setting values saved in the NVRAM of the printer controller.	Turn OFF the power, then turn it on again. If the error persists, consult your Tech. Rep.
1821	Parallel interface error	
1822	NIC function level error	
1823	NIC error	
1880-18FF	Informs that part of the printer controller functions have been disabled because of a fatal error detected.	Turn OFF the power, then turn it ON again. If the error persists, consult your Tech. Rep.

This manual contains the specifications for the printer controller. Refer to the documentation provided for the machine for the machine specifications.

Appendix A

1. Function Combination Matrix

Function Combination Matrix

			Paper																	
			Paper Source				Finishing					Layout								
			Auto	Drawer2 ~ Drawer5, LCC	Drawer1[MPC]	Bypass	Uncollated	Collated	Group	Staple	Hole Punch	1-sided 1in1	2-sided 1in1	1-sided 2in1	2-sided 2in1	1-sided 4in1	2-sided 4in1	Zoom	Booklet
Paper	Paper Source	Auto		×	×	×	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
		Drawer2 ~ Drawer5, LCC	×		×	×	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
		Drawer1[MPC]	×	×		×	❍	❍	❍	❍	❍	❍	△	❍	△	❍	△	❍	△
		Bypass	×	×	×		❍	×	×	×	△	❍	×	×	×	×	×	❍	×
	Finishing	Uncollated	❍	❍	❍	❍		×	×	×	❍	❍	❍	❍	❍	❍	❍	❍	×
		Collated	❍	❍	❍	×	×		×	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
		Group	❍	❍	❍	×	×	×		❍	❍	❍	❍	❍	❍	❍	❍	❍	×
		Staple	❍	❍	❍	×	×	❍	❍		❍	❍	❍	❍	❍	❍	❍	❍	×
		Hole Punch	❍	❍	❍	△	❍	❍	❍	❍		❍	❍	❍	❍	❍	❍	❍	×
	Duplex Print/Layout	1-sided 1in1	❍	❍	❍	❍	❍	❍	❍	❍	❍		×	×	×	×	×	×	×
		2-sided 1in1	❍	❍	△	×	❍	❍	❍	❍	❍	×		×	×	×	×	×	×
		1-sided 2in1	❍	❍	❍	×	❍	❍	❍	❍	❍	×	×		×	×	×	×	×
		2-sided 2in1	❍	❍	△	×	❍	❍	❍	❍	❍	×	×	×		×	×	×	×
		1-sided 4in1	❍	❍	❍	×	❍	❍	❍	❍	❍	×	×	×	×		×	×	×
		2-sided 4in1	❍	❍	△	×	❍	❍	❍	❍	❍	×	×	×	×	×		×	×
		Zoom	❍	❍	❍	❍	❍	❍	❍	❍	❍	×	×	×	×	×	×		×
		Booklet	❍	❍	△	×	×	❍	×	×	×	×	×	×	×	×	×	×	
Advances	Distribution Number		❍	❍	❍	×	×	❍	×	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
	Watermark		❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
	OHP Interleaving		-	-	-	-	❍	❍	❍	×	×	❍	×	×	×	×	×	❍	×
	Cover mode		-	-	-	-	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	×

❍: The combination is possible.

× : The combination is impossible.
(The settings made are rejected.)

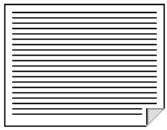
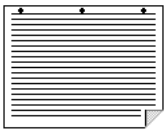
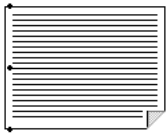
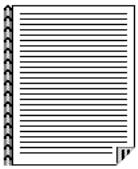
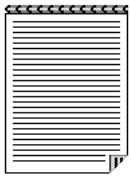
△: Rejects the use of special paper. If special paper is selected, the machine automatically reselects another paper source loaded with an appropriate type of paper.

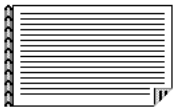
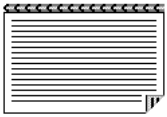
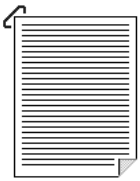
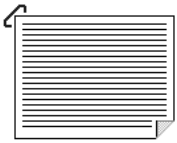
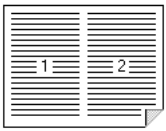
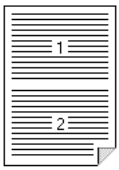
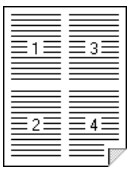
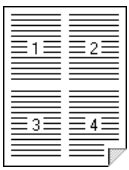
- : Enables "OHP Paper Source" of "OHP Interleaving" and "Cover Paper Source" of "Cover Mode," while disabling "Paper Source."

			Advanced			
			Distribution Number	Watermarks	OHP Interleaving	Cover mode
Paper	Paper Source	Auto	❍	❍	-	-
		Drawer2 ~ Drawer5, LCC	❍	❍	-	-
		Drawer1[MPC]	❍	❍	-	-
		Bypass	×	❍	-	-
	Finishing	Uncollated	×	❍	❍	❍
		Collated	❍	❍	❍	❍
		Group	×	❍	❍	❍
		Staple	❍	❍	×	❍
		Hole Punch	❍	❍	×	❍
	Duplex Print/Layout	1-sided 1in1	❍	❍	❍	❍
		2-sided 1in1	❍	❍	×	❍
		1-sided 2in1	❍	❍	×	❍
		2-sided 2in1	❍	❍	×	❍
		1-sided 4in1	❍	❍	×	❍
		2-sided 4in1	❍	❍	×	❍
		Zoom	❍	❍	❍	❍
		Booklet	❍	❍	×	×
Advances	Distribution Number			❍	×	❍
	Watermark		❍		❍	❍
	OHP Interleaving		×	❍		×
	Cover mode		❍	❍	×	

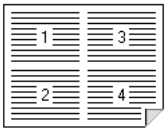
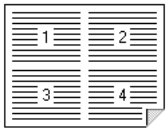
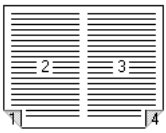
2. Preview Listing

[Paper Preview]

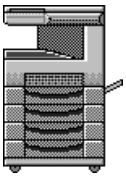
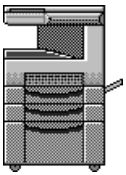
Value Defined for Print Setting Item	Screen Specifications	Value Defined for Print Setting Item	Screen Specifications
Portrait	4608P065CA	LandScape	 4608P066CA
HolePunch= Long Edge Portrait	4608P067CA	HolePunch= Short Edge Portrait	4608P068CA
HolePunch= Long Edge Landscape	 4608P147CA	HolePunch= Short Edge Landscape	 4608P146CA
DuplexPrint= Bind Long Edge Portrait	 4608P070CA	DuplexPrint= Bind Short Edge Portrait	 4608P069CA

Value Defined for Print Setting Item	Screen Specifications	Value Defined for Print Setting Item	Screen Specifications
DuplexPrint= Bind Short Edge Landscape	 4608P148CA	DuplexPrint= Bind Long Edge Landscape	 4608P149CA
Staple= Corner Portrait	 4608P071CA	Staple= Corner Landscape	 4608P150CA
2in1 Portrait	 4608P072CA	2in1 Landscape	 4608P183CA
4in1(Vert) Portrait	 4608P142CA	4in1(Horiz) Portrait	 4608P141CA

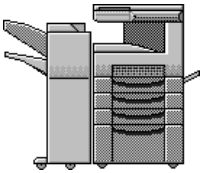
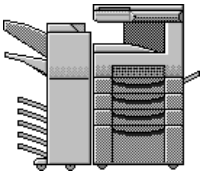
2. Preview Listing

Value Defined for Print Setting Item	Screen Specifications	Value Defined for Print Setting Item	Screen Specifications
4in1(vert) Landscape	 4608P073CA	4in1(Horiz) Landscape	 4608P074CA
Booklet Portrait	 4608P075CA	Booklet Landscape	4608P184CA
Watermark	4608P076CA		

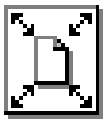
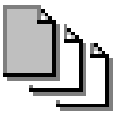
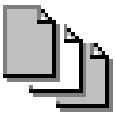
[Machine Preview]

Value Defined for Print Setting Item	Screen Specifications	Value Defined for Print Setting Item	Screen Specifications
Installed Drawer= Drawer1, 2	4608P077CD	Installed Drawer= Drawer1, 2, 3	4608P078CD
Installed Drawer= Drawer1, 2, 3, 4	 4608P079CD	Installed Drawer= Drawer1, 2, 3, 4, 5	4608P080CD
Installed Drawer= Drawer1, 2 + LCC	 4608P081CD	Installed Drawer= Drawer1, 2, 3 + LCC	4608P082CD
Duplex unit= Installed	4608P083CD	Finisher= Job Tray	4608P084CD

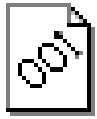
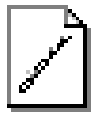
2. Preview Listing

Value Defined for Print Setting Item	Screen Specifications	Value Defined for Print Setting Item	Screen Specifications
Finisher= ShiftTray	4608P085CD	Finisher= Finisher	 4608P086CD
Finisher= MailBin Finisher	 4608P087CD		

[Setting Preview]

Value Defined for Print Setting Item	Screen Specifications	Value Defined for Print Setting Item	Screen Specifications
Access Code=On	4608P125CA	Zoom	 4608P088CA
Cover Mode	 4608P089CA	Cover Mode (With Image)	4608P090CA
Cover Mode (With Back Cover)	 4608P091CA	Cover Mode (With Image with Back Cover)	4608P092CA
OHP Interleaving	4608P093CA	OHP Interleaving (With Image)	4608P094CB

2. Preview Listing

Value Defined for Print Setting Item	Screen Specifications	Value Defined for Print Setting Item	Screen Specifications
Distribution Number (Only 1st Page)	4608P096CA	Distribution Number (All Page)	 4608P185CA
Watermark (Only 1st Page)	4608P098CA	Watermark (All Page)	 4608P097CA
Lock Job	4608P095CA		

3. Specifications

Specifications

The basic specifications for Hi-35*pc* are given below.

Model Name	: Hi-35*pc*
Type	: Optional printer controller mounted externally on back of machine
Printer Language	: PCL5e, PCL6, PostScript level 2 Emulation
Print Speed	: 35 ppm (A4C, LetterC)
CPU	: PowerPC 603e (100 MHz)
ROM (program)	: 8MB (Flash ROM), SIMM
RAM	: 16MB [8MB (on Board) + 8MB (DIMM)] Max. 72MB (max.: 168-pin DIMM 1 slot)
Transfer Image Density	: 600 × 600dpi
Interface (on machine)	: Unique 8-bit parallel
Interface (on host)	: Centronics Interface
Networks	: 10Base-T/2 (UTP/BNC) 10/100BaseT (UTP)
Network Protocol	: TCP/IP, IPX/SPX
Network Management	: To be managed from SNMP-compatible Web browser
Power Requirements	: 5V ± 5%, 6A max.
Power Consumption	: 30W max.
Exterior Dimensions	: Width: 10-1/2” (264mm) × Depth: 3-1/4” (80mm) × Height: 8” (204mm)
Weight	: 4 lbs. (1.8 kg)
Operating Environment	
Temperature	: 50°F (10°C) to 95°F (35°C)
Humidity	: 15 to 85% RH (no condensation)

Fonts:	PCL5e/PCL6	TrueType font, 10
		Agfa Intelli font, 35
	Adobe PostScript Level 2 Emulation Type 1 font, 35	
Accessories:	Printer Driver (CD-ROM) for Hi-35*pc* Printer Controller	
	Engine interface cable 30 cm	
	Short harness with ferrite core (except the U.S.A. and Canada)	
	Ferrite core (except the U.S.A. and Canada)	
	Tie band (except the U.S.A. and Canada)	
	Windows User's Manual	
	Macintosh User's Manual	
	Software License Agreement	

Font

TrueType, 10

Arial
Arial Italic
Arial Bold
Arial Bold Italic
Symbol
Time New Roman
Times New Roman Italic
Times New Roman Bold
Times New Roman Bold Italic
Wingdings

Intelli font, 35

Albertus Medium
Alubrtus Extra Bold
Antique Olive
Antique Olive Bold
Antique Olive Italic
Clarendon Condensed
Coronet
Courier
Courier Italic
Courier Bold
Courier Bold Italic
Garamond Antiqua
Garamond Kursiv
Garamond Halbfett
Garamond Kursiv Halbfett
Letter Gothic
Letter Gothic Italic
Letter Gothic Bold
Marigold
CG Omega
CG Omega Italic
CG Omega Bold
CG Omega Bold Italic
CG Times
CG Times Italic
CG Times Bold
CG Times Bold Italic
Univers Medium
Univers Medium Italic
Univers Bold
Univers Bold Italic
Univers Medium Condensed
Univers Medium Condensed Italic
Univers Bold Condensed
Univers Bold Condensed Italic

PostScript font, 35

ITC Avant Grade Gothic Book
ITC Avant Grade Gothic Book Oblique
ITC Avant Grade Gothic Demi
ITC Avant Grade Gothic Demi Oblique
ITC Bookman Demi
ITC Bookman Demi Italic
ITC Bookman Light
ITC Bookman Light Italic
Courier
Courier Bold
Courier Bold Oblique
Courier Oblique
Palatino Bold Italic
Helvetica
Helvetica Bold
Helvetica Bold Obliqu
Helvetica Oblique
Helvetica Narrow
Helvetica Narrow Bold
Helvetica Narrow Bold Oblique
Helvetica Narrow Oblique
New Century Schoolbook Bol
New Century Schoolbook Bold Italic
New Century Schoolbook Italic
New Century Schoolbook Roman
Palatino Bold

Palatino Italic
Palatino Roman
Times Bold
Times Bold Italic
Symbol
Times Italic
Times Roman
ITC Zapf Chancery medium Italic
ITC Zapf Dingbats

Symbol Sets

No.	Symbol Set Name
1	Roman-8
2	ISO 8859/1 Latin 1
3	ISO 8859/2 Latin 2
4	ISO 8859/9 Latin 5
5	PC-8:Code Page 437
6	PC-8:Danish/Norwegian
7	PC-850 Multilingual
8	PC-852 Latin 2
9	PC-Turkish
10	Windows3.1 Latin 1
11	Windows3.1 Latin 2
12	Windows3.1 Latin 5
13	DESKTOP
14	PS Text
15	Ventura International
16	Ventura US
17	Microsoft Publishing
18	Math-8
19	PS Math
20	Ventura Math
21	Pi Font
22	Legal
23	ISO 4:United Kingdom
24	ISO 6:ASCII
25	ISO 11:Swedish
26	ISO 15:Italian
27	ISO 17:Spanish
28	ISO 21:German
29	ISO 60:Norwegian V1
30	ISO 69:French
31	Windows3.0 Latin 1

Selectable Paper Sizes

Letter / Ledger/ 11 × 14 / Legal / Invoice
Executive / A6 / A5 / A4 / A3 / B6 / B5 / B4
FLS1 / FLS2 / FLS3 / FLS4

Appendix B

1. Glossary

Glossary

10BASE-T
A network data transfer standard established by the IEEE. The network uses a twisted-pair cable carrying 10 megabits per second (10Mbps).

10BASE-2
A network data transfer standard established by the IEEE. Also called the thin Ethernet, the network uses a 5-mm-dia. unshielded coaxial cable carrying 10 megabits per second (Mbps).

100BASE-T
A network data transfer standard established by the IEEE. The network uses a twisted-pair cable carrying 100 megabits per second (Mbps).

application
A software program that performs a particular function, such as generating graphics or spreadsheets.

click
To press and release a mouse button quickly. Often used to select an object. SEE double-click.

control panel
A bank of indicators that show the current status of the printer.
Panel buttons that are located on the control panel make it possible to perform a variety of different operations.

default
Settings that are preset in the absence of user-specified settings.

dialog box
A box that appears in order for the user to input information or settings required for the printer to operate.

double-click
Pressing a mouse button twice in quick succession while keeping the mouse in place. Often used to open a dialog or enable a function. SEE click.

display
A visual output device of a computer.

resolution
The fineness of detail of the output print, expressed in the number of dots per inch (dpi, or dots per inch). Higher resolution produces text and graphics with greater sharpness and fineness of detail, but results in a greater amount of data involved.

EtherTalk
The AppleTalk protocol supporting Ethernet. It allows Macintosh users to use the Ethernet.

font
A complete set of characters in a given typeface and style. The size of characters is specified in points (1/72 inches).
Typeface is the distinctive design of types, such as gothic, while style is an ornament, such as italic.

halftone
Gradations of tones expressed by means of varying densities of dots.

hard disk drive
A device that is contained in a computer and peripheral equipment and used to save data and files.
In the printer controller, it is used to save fonts downloaded from the computer. Its data is retained even when the main power is turned OFF.

icon
A graphic image on the screen that represents an element.

interface
A standard that governs the ways for two different systems to exchange information. It specifies the format of data to be transmitted, communications protocols, and physical configurations for connection.

IPX/SPX
The communications protocols used by NetWare.

landscape (paper orientation)
A horizontal print orientation, in which printing is oriented so that the long edges of a sheet of paper are on top and bottom.

local printer
The printer that is directly connected to the computer being used. A printer connected to a network is called the remote printer.

memory

The place in a computer where data can be stored and retrieved. The amount of data stored is expressed in bytes. Memory can either be RAM or ROM. Generally, the data stored in RAM is lost when power is turned OFF, while that in ROM is retained even when power is turned OFF, but cannot be rewritten.

Network Interface Card (NIC)

An optional card to which network interface can be added, used for connecting a printer to network environment.

offline

The state of the printer controller, in which it does not receive data or execute any processing.

online

The state of the printer controller, in which it is capable of receiving data and processing jobs.

operation system

A program or group of programs that control the functions of the computer and its peripheral devices such as the printer.

parallel interface

A type of standards that govern the ways for two different systems to exchange information, in which multiple bits are transmitted at one time. Because of that, synchronization is necessary, which makes the scheme not right for data transmission over a long distance. The most common parallel interface is Centronics.

port

A connector through which data is exchanged between a computer and peripheral equipment.

The parallel port permits multiple-bit data to be transmitted at one time, commonly used in printers. The serial port is generally used to connect a modem or other device.

portrait (paper orientation)

A vertical print orientation, in which printing is oriented so that the short edges of a sheet of paper are on top and bottom.

PostScript font

A scalable outline font standard, widely adopted in the printing industry. By downloading PostScript fonts in a PostScript-compatible printer, it is possible to produce smoother letters than bit-mapped fonts can.

PostScript printer software
The program that is used on the computer to enable printing on PostScript printers.

printer driver
Software that enables controlling printer operations.

print job
A single batch of job for printing specified at one time from an application. It may be directly transmitted to the printer, or temporarily stored in a print queue.

print manager
An application that manages the print queue and print files.

resolution
See dpi.

SIMM
An acronym for Single In-line Memory Module.

TCP/IP
The standard data transfer protocol over the Internet. Data is transferred by breaking up data messages into packets, to which IP addresses are attached.

TrueType font
A soft font standard the system has. TrueType is a font technology that ensures that the printed output is identical to what you see on-screen. It is also scalable, capable of producing characters in varying sizes.

gray scale
The method of representing color data on a monochrome device by approximating the data with shades of gray (halftone).

paper
The medium on which the printer can print data. Varieties include OHP transparencies, labels, letterhead, and postcards, in addition to plain paper and recycled paper.

1. Glossary

Appendix C

1. INDEX

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